

Vancouver Senate

THE NINTH REGULAR MEETING OF THE VANCOUVER SENATE  
FOR THE 2018/2019 ACADEMIC YEAR

WEDNESDAY, 15 MAY 2019

6:00 P.M.

ROOM 182, IRVING K. BARBER LEARNING CENTRE,  
1961 EAST MALL

**1. Senate Membership – Dr Kate Ross**

**New Member**

Ms Natasha Rygnestad-Stahl, Student Senator for the Peter A. Allard School of Law, until 31 March 2020 and thereafter until replaced, to replace Mr Alex Starr.

**Nominating Committee:**

In response to the call for nominations issued at the previous meeting, nominations have been received for Ms Julia Burnham and Mr J. Maximillian Holmes to serve on the Senate Nominating Committee. As there are only two nominees for two positions, they are acclaimed as elected until 31 March 2020 and thereafter until replaced.

**2. Minutes of the Meeting of 17 April 2019– Dr Santa Ono (approval)**  
(docket pages 5-19)

**3. Business Arising from the Minutes – Dr Santa Ono**

**4. Remarks from the Chair and Related Questions – Dr Santa Ono**  
(information)

**5. Candidates for Degrees – Dr Santa Ono**

The list as approved by the faculties is available for advance inspection at the Senate office, and will also be available at the meeting.

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 2019, 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 – Dr Perry Adebar**

Annual Report of the Budget Committee (information) (docket pages 20-23)

**7. From the Okanagan Senate – Dr Kate Ross**

Memorial Minute for Dr W. Wesley Pue (information) (docket pages 24-25)

**8. Academic Building Needs Committee – Dr Michael Isaacson**

Annual Report (information) (docket pages 26-28)

**9. Academic Policy Committee – Dr Paul Harrison**

- a. New Policy V-135: Academic Concession (approval) (docket pages 29-43)
- b. Establishment of the Centre for Innovative Data in Economics Research (approval) (docket pages 44-73)
- c. Discontinuation of Rolling Graduation for Graduate Students (approval) (docket pages 74-78)

**10. Admissions Committee – Prof. Carol Jaeger**

- a. Revisions to English Language Admission Standard – English Language Competency (approval) (docket pages 79, 81-89)
- b. Revisions to Readmission Regulations for the Bachelor of Arts and Bachelor of Fine Arts (approval) (docket pages 79, 90-94)
- c. Change to the Non-Degree Studies Application Deadlines (approval) (docket pages 79, 95-97)
- d. Annual Report on Appeals and Other Matters of Delegated Authority (information) (docket pages 98-100)

**11. Agenda Committee – Mr Jakob Gattinger**

Draft Senate Code of Conduct and Conflict of Interest Rules (information)(docket pages 101-109)

**12. Appeals on Academic Standing – Prof. Anthony Sheppard**

Annual Report (information) (docket pages 110-112)

**13. Awards Committee – Dr Lawrence Burr**

New and Revised Awards (approval) (docket pages 113-132)

**14. Joint Report of the Admissions and Curriculum Committees – Dr Peter Marshall and Prof. Carol Jaeger**

- a. Revision to the Master of Engineering Leadership in Sustainable Process Engineering (approval) (docket pages 133-142)
- b. Revision to the Master of Business Administration (approval)(docket pages 133, 148-150)
- c. Revision to the Doctor of Philosophy in School and Applied Child Psychology (approval) (docket pages 133-134, 148-150)
- d. Revision to the Master of Arts in School and Applied Child Psychology (approval) (docket pages 133-134, 151-161)
- e. Revision to the Master of Education in School and Applied Child Psychology (approval) (docket pages 133-134, 151-161)
- f. Discontinuation of the Master of Arts in Mathematics (approval)(docket pages 133-134, 162-164)

**15. Curriculum Committee – Dr Peter Marshall**

- a. Curriculum Proposals from the Faculties of Applied Science, Arts, Commerce and Business Administration, Education, Graduate and Postdoctoral Studies, and Science. (approval) (docket pages 165-262)
- b. New Certificate: Graduate Certificate in Aquaculture (information) (docket pages 263-271)

**16. Library Committee – Dr Lawrence Burr**

Annual Report (information) (docket page 272)

**17. Nominating Committee – Dr Richard Tees**

Appointments to Committees and the Council of Senates (approval) (docket pages 273-276)

**18. Student Appeals on Academic Discipline – Mr Tariq Ahmed**

Annual Report (information) (docket pages 277-288)

**19. Teaching & Learning Committee – Dr Andre Ivanov**

- a. Principles for Digital Learning Materials Used for Assessments (approval) (docket pages 289-296)
- b. Annual Report (information) (docket pages 297-299)

**20. Tributes Committee – Dr Sally Thorne**

Candidates for Emeritus Status (approval) (docket pages 300-302)

**21. Report from the Provost – Dr Andrew Szeri**

- a. Update on Strategic Plan Implementation (information) (docket pages 303-311)
- b. Inclusion Action Plan (information)
- c. Annual Report on Emeritus College (information)

**22. Report from the Registrar – Dr Kathleen Ross**

Operation of Senate Appeals Committees (information) (docket pages 312-314)

**23. Other Business**

**24. IN CAMERA – Awards Committee – Dr Lawrence Burr**

New Award (approval)

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](mailto:facsec@mail.ubc.ca)

*UBC Senates and Council of Senate website: <http://www.senate.ubc.ca>*

NB: An earlier version of this material misspelled Senator Thorne's name on page 4, Senator Leuprecht's name on page 274, and omitted one instance of a replacement on page 275

# VANCOUVER SENATE

## MINUTES OF 17 APRIL 2019

**DRAFT**

### Attendance

**Present:** S. Ono (Chair), K. Ross (Secretary), P. Adebar, T. Ahmed, S. Bates, L. Burr, J. Chai, A. Collier, M. Coughtrie, B. Fischer, A. Fisher, S. Forwell, B. Frank, J. Gilbert, A. Gonzalez, S. Grayston, V. Griess, C. Hakim, P. Harrison, M. Holmes, C. Jaeger, P. Keown, C. Krebs, M. Kuus, M. Leuprecht, K. Lo, P. Loewen, D. MacDonald, K. Madill, P. Marshall, S. Matsui, B. McNulty, L. Milroy, A. Murphy, J. Olson, T. Onifade, N. Pang, S. Parker, A. Sheppard, S. Singh, M. Stewart, C. Surniawan, A. Szeri, R. Tees, S. Thorne, V. Tsang, R. Ty, M. Upadhyaya, R. Yada, E. Zusman

**Regrets:** G. Faulkner, I. Frigaard, J. Greenman, M. Koehoorn, B. McKee, M. MacDougall, C.W. Marshall, S. Ngo, T. Rogers, A. Tanner, R. Topping

**Clerk:** C. Eaton

### Call to Order

The Chair of Senate, Dr Santa Ono called the eighth regular meeting of the Vancouver Senate for the 2018/2019 Academic Year to order at 6:01 pm.

### Senate Membership

#### NEW MEMBERS

The Registrar announced the new student members of Senate for terms from 1 April 2019 to 31 March 2020 and thereafter until replaced:

Applied Science  
Mr Alex Gonzalez

Arts  
Mr Mathias Leuprecht (Continuing)

Commerce and Business Administration  
Mr Dante Agosti-Moro

Dentistry  
Ms Rojin Djavanmardi

Forestry  
Mr Christian Surniawan (Continuing)

Graduate and Postdoctoral Studies  
Mr Temitope Onifade  
Ms Alexa Tanner (Continuing)

Land and Food Systems  
Ms Lillian Milroy

Medicine  
Ms Vivian Tsang

Pharmaceutical Sciences  
Ms Enav Zusman

Science  
Mr Riley Ty

Members at-large  
Ms Julia Burnham – Faculty of Arts  
Ms Julia Chai – Faculty of Science  
Mr Christopher Hakim – Faculty of Arts  
Mr J. Maximillian Holmes - Faculty of Arts (Continuing)  
Mr Nick Pang – Faculty of Pharmaceutical Sciences (Continuing)

The Registrar noted that the Education Student Senator Position transitions in October of each year and that the name of the new Senator for Allard Law had not yet been given to her office.

#### **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 2020 and thereafter until replaced.

#### **VICE CHAIR**

The Registrar advised that as a result of the call for nominations issued with the agenda, only one candidate had been nominated. She therefore declared Mr Matthias Leuprecht acclaimed elected as Vice-Chair of the Senate for a term of no more than one (1) year pursuant to Section 37(1)(a) of the *University Act*.

#### **Minutes of 20 March 2019**

Richard Tees	}	<i>That the Minutes of the Meeting of 20 March 2019 be adopted as corrected:</i>
Peter Marshall		

*Spelling of Senator Pang and Collier's names.  
Senator Haffey was in attendance.*

Approved

## **Business Arising**

The Registrar advised that her office was still considering the comments made by former-Senator Malone at the previous meeting and would provide a response at the next meeting.

Senator Holmes suggested that the students had asked for an opportunity to have a conversation rather than a reply.

The Registrar replied that she could set up a meeting with Ms Malone before providing the Senate with an update.

## **President's Remarks**

The President welcomed UBC's new Vice-President, Students, Dr Ainsley Carry, who was present in the gallery. He noted that Dr Carry came to UBC from the University of Southern California, where he served as vice-president for student affairs.

Dr Ono announced that UBC ranked number one in the world for taking urgent action to combat climate change and its impacts and ranked number one in Canada for making cities inclusive, safe, resilient and sustainable, according to Times Higher Education. He suggested that UBC's achievements in these rankings is a clear reflection of the great work of our students, faculty and staff who combine their expertise to ensure UBC is a leader in creating vibrant, sustainable and connected communities and campuses.

The President congratulated Dr Connie Eaves, who has been awarded the 2019 Canada Gairdner Wightman Award. The award recognizes scientists who make transformative contributions to research that impacts human health. Dr. Eaves received the prestigious award for her pioneering work and leadership in the study of hematopoietic, mammary and cancer stem cells, as well as for her dedicated advocacy for early career investigators and women in science.

The President advised that he spoke about UBC's strategic plan at the American Council on Education (ACE) meeting in Philadelphia in March. ACE is the major coordinating body for colleges and universities in the United States and it was an honour to discuss our strategic plan with such an influential group. He noted that he had a similar conversation on implementing the strategic plan during his annual address to the Greater Vancouver Board of Trade, with particular reference to how the plan affects the Metro Vancouver region.

Dr Ono reminded Senate that last week, McGill Principal Suzanne Fortier and he announced the creation of the Peterson-Wesbrook Scholars Program to support the reciprocal exchange of

students between McGill and UBC. The program is named in honour of Sir William Peterson, Principal of McGill University from 1895 to 1919, and Frank Wesbrook, founding President of UBC. The Peterson-Wesbrook Scholars Program will facilitate the exchange of students for scholarly work and will allow students to benefit from the special facilities and courses found at each university. Both UBC and McGill have provided seed funding for the program.

The President further noted that on April 8, he had cohosted a President's Community Roundtable on supporting non-market housing innovation in Metro Vancouver. Housing and community advocates and experts came together with myself and Dr Penny Gurstein of the Housing Research Collaborative to discuss UBC's role in non-market housing in the region. That same week he participated in the first ever UBC Emeritus College Symposium, moderating a panel on scholarship in the age of populism and fake news.

Dr Ono advised that four UBC computer scientists have been appointed to chairs as part of an expansion of the Canada-CIFAR AI Chairs program. The AI program, funded by the Federal government with \$86.5 million over five years, provides researchers with long-term, dedicated funding to support their research programs and help them train the next generation of Canadian AI leaders. The new UBC Science Canada CIFAR AI Chairs are Leonid Sigal, Kevin Leyton-Brown, Mark Schmidt, and Frank Wood. They join UBC statistician Sara Mostafavi, appointed to the program in 2018.

Finally, the President expressed his pride in UBC continuing to excel in international rankings. Today Clarivate Analytics announced that UBC is ranked #19 in world and #1 in Canada in research. He suggested that this is a tribute to VP Research and Innovation Gail Murphy, her team, and most importantly, to all of UBC's outstanding researchers.

## **Budget Presentation**

The Vice-President Finance and Operations, Dr Peter Smailes and the Vice-President Academic and Provost, Dr Andrew Szeri presented.

Senator Hakim thanked them for including students in the consultation. He asked why the faculty and department budgets had some large reserve funds, especially Medicine.

The Provost said Medicine was a large irrigation that was interdigitated with the health authorities. In most cases those reserves are not held by dean's offices but rather by included units. Those units are saving for important activities; for example, Psychology is saving reserves for a renovation of the Kenny Building to add space for five new faculty labs. Another use could be to plan for upcoming retirements.

Mr Smailes added that for Medicine, the government has provided additional funding that is being spent over time.

Senator Holmes asked about the reserve draw down additions. Some only had 1 or 2%, but for others it was close to 10%. Why the large additions?



The Provost said that, for example, LFS was saving for a number of years for a new building on the farm. Smailes added that one point of the budget was to highlight why reserve funds existed and what they were intended for.

Senator Singh noted the increases in projected international revenue and asked if increases, 13% in this case, were sustainable over the next decade given international competition and domestic politics.

The Provost noted that at the last Senate meeting he presented on long-term enrolment planning. We had a period of rapid growth but that growth is now levelling off. Those enrolment targets are approved by the Board and Senate annually. We do a lot of work to ensure that we have a diverse body of international students, unlike some other Canadian universities. That both gives us more sustainability and improves the learning environment. We do consider space and teaching capacity carefully in working out enrolment planning.

Senator Singh asked what aspect of our budget was targeted towards experiential learning. As the budget flows from central to the faculty to the department, we don't necessarily see that reflected.

The Provost said that experiential learning and undergraduate research are partially funded by faculties and departments and partly from the central budget. One of the things the strategic plan calls us to do is have a more coherent plan for our programs, investments, and expenditures in this area.

The President thanked the Senator for the question. He suggested that as a university we can never take in such revenues for certain, and the executive and board were also considering this issue. We do have other levers, for example, we are trying to advance our development opportunities to augment or fill gaps. There is also some federal or provincial funding available for certain initiatives. Also, institutions always have to look below the increment to see how efficient UBC is. We always hope that we can be more efficient and have cost savings. Dr Ono committed to reporting back to the Senate on this.

Senator Krebs said that for research excellence the allocation was \$34 million and for transformational learning only \$5 million. She suggested that this area was a key priority for our strategic plan and these numbers seemed small by comparison. She asked what was the rationale and how those allocations were made?

The Provost said that this was a snapshot in time. We are making a large investment in digital research computing infrastructure. This would be a sustained investment that would lift us to a new level. A year from now we will be back with not such a large investment for research and instead we will propose investment elsewhere. We are making this investment because the national infrastructure is not working for many UBC researchers. We are still continuing a sustained pattern of investment in the teaching and learning enhancement fund, and the new online learning advancement fund.

The President added that across the overall budget, one thing not mentioned frequently is the \$668 million in research income that funds a lot of things in the budget. Infrastructure support for research is under duress right now across UBC. STEM and Health disciplines in particular need support here, we are trying to solve that via U15 and Universities Canada but that is a slow process so this focused investment is to allow our researchers to continue.

Senator Leuprecht noted that page 20 and 22 differed in terms of their strategic hires, with the former referring to Law and Education and the latter including Medicine.

The Provost said it was a question of from where the funding was being allocated. We are working to renew the Faculty of Medicine. The issue with Law and Education is that they can only accommodate domestic students in most cases and they have constrained domestic tuition. From time to time we do aid all the faculties in their hiring aspirations.

Senator Chai asked what the distribution was for projects within the envelope for individual projects.

The Provost said this was a high level budget presentation; each proposal has its own budget and rationale that is reviewed under the budget process.

The President said we can make the details available upon request.

### Academic Policy Committee

The Chair of the Senate Academic Policy Committee, Dr Paul Harrison presented.

#### REVISION TO ACADEMIC REGULATIONS FOR THE FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES

Paul Harrison Philip Loewen	}	<p><i>That Senate approve the amended Calendar language put forward by the Faculty of Graduate and Postdoctoral Studies for the following policies as set out in the attached two column forms:</i></p> <ul style="list-style-type: none"> <li><i>a) Duration of Program</i></li> <li><i>b) Program of Study for Doctoral Students; and,</i></li> <li><i>c) Part-time International Students.</i></li> </ul>
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Senator Harrison suggested that these changes were editorial improvements for clarity rather than substantive.

Approved

## Agenda Committee

With the permission of Senate, former Senator Gattinger spoke to this proposal

### INTER-CAMPUS MOBILITY

Paul Harrison	}	<i>That the President be directed to arrange for a report to be presented to the September 2019 meeting of Senate on the current state of inter-campus mobility and cross-campus academic collaboration between the Vancouver and Okanagan campuses of the University; and</i>
Richard Tees		

*That the motion for which notice was given at the March 2019 meeting of Senate be placed on the agenda of the September 2019 meeting of Senate for consideration.*

Mr Gattinger explained that this would give the administration a chance to update materials to ensure a more informed debate.

Approved

## Awards Committee

The Chair of the Senate Awards Committee, Dr Lawrence Burr, presented.

### AWARDS REPORT

*See Appendix A: Awards Report*

Lawrence Burr	}	<i>That Senate accept the awards as amended and forward them to the Board of Governors for approval; and that letters of thanks be sent to the donors.</i>
Anthony Sheppard		

Approved

### INTERIM REPORT ON SUMMER SESSION COURSES AND STUDENT AWARDS

Dr Burr advised that an interim report had been distributed to the Senate.

The Committee settled on four principles that would guide the Committee's decision-making process in this inquiry:

### 1. Equality of Access

*All students should have an equal opportunity to earn merit-based awards. Awards eligibility rules should not unreasonably disadvantage students for reasons unrelated to merit.*

### 2. Maintenance of Rigour

*Merit-based awards should continue to recognize academic or other achievement. Changes to awards eligibility rules should not dilute the significance of the achievement represented by merit-based awards.*

### 3. Transparency

*The criteria for granting awards should be clear, public, and easy to understand. Students should be able to determine in advance of registration whether or not they will be eligible for awards.*

### 4. Administrative Efficiency

*The administration of awards programs should not be an undue burden on the University's resources, relative to the impact on students.*

Dr Burr advised that they had also surveyed other Canadian post-secondary institutions practices in this area. The results of the survey revealed that there is no clear consensus as to whether and how summer courses are considered in awards adjudication processes in Canadian post-secondary educational institutions. While the majority of institutions do not consider summer session courses in adjudicating awards, a significant number do take summer session courses into account, at least in some circumstances.

Dr Burr further advised that his Committee had reached out to all the faculties, 9 replied. We have also requested data from PAIR. He noted that some faculties expressed skepticism that a change would make a difference.

Dr Burr stated that once the Committee has had an opportunity to review the results of the request to PAIR, the Committee will consider the implications of that data for different possible policy changes. The Committee will assess the potential impact of different changes and determine whether any promising options for policy change can be identified. The Committee will then seek an opinion from the Registrar on the impact of any such changes. The Committee will ask the Registrar to advise on the practicalities of implementing any such changes, both within the current Student Information System and within the Workday platform, and to leverage the expertise within Enrolment Services to offer guidance on the impact of any possible changes on students and on adjudication processes.

If, based on the opinion of the Registrar, there remain policy changes worth considering, the Committee will then seek the input of the Academic Policy Committee and other relevant Senate

Committees before proposing possible changes to the Faculties, representative student bodies and other stakeholders through a campus-wide consultation process. Subject to the results of this consultation process, the proposed changes would then be proposed to Senate for approval.

Senator Loewen said that if the committee made a decision to make no changes they should report back to the Senate on that basis.

Senator Burr agreed and said that was their intent.

## Curriculum Committee

The Chair of the Senate Curriculum Committee, Dr Peter Marshall, presented.

### APRIL CURRICULUM REPORT

*See Appendix B: Curriculum Report*

Peter Marshall	}	<i>That the new courses, revised courses, revised program option, and discontinuation of admittance to a major brought forward by the faculties of Arts, Education, Land and Food Systems, and Science be approved.</i>
Michael Isaacson		

Dr Marshall presented a summary of the proposed curriculum changes.

Approved

### NEW CERTIFICATES

Dr Marshall said that these were existing programs that were never officially approved. His Committee had reviewed the certificates and finding them to be appropriate, has approved them retrospectively:

- Certificate in Early Years Education (EYED)
- Certificate in Infant Development and Supported Childcare (IDSC)
- Certificate in Health and Wellness
- Undergraduate Certificate in Textiles Studies
- Certificate in Teaching About Visual and Material Culture
- Certificate in Teacher Librarianship (LIBE)
- Certificate in Teaching English as a Second Language (TESL)

### Adjournment

Seeing no other business, the meeting was adjourned at 7:22 pm.

## **Appendix A: Awards Report**

### **NEW AWARDS – ENDOWED**

#### **B. Ann Hilton Fellowship in Nursing**

A \$1,200 fellowship has been made available through an endowment established by B. Ann Hilton (B.S.N. 1968, M.S.N., Ph.D.) for outstanding graduate students in the School of Nursing. Dr. Hilton began her nursing career in Toronto, working in the nursing research unit at Sunnybrook Hospital. She became a faculty member at the University of Toronto. In 1974 she joined UBC as an Assistant Professor in the School of Nursing. Dr. Hilton was promoted to Associate Professor and Full Professor, and retired in 2005 as a Professor Emerita. Her research focused on how individuals and families cope with life-threatening and chronic illnesses. A major focus was on coping with uncertainty. She authored numerous peer-reviewed publications. Her research was supported by many provincial and national grants. She was well known for her expertise in program evaluation. Dr. Hilton was actively involved in several nursing organizations including the Canadian Association of Nurses in Oncology, the International Society of Nurses in Cancer Care and Sigma Theta Tau (The International Honor Society of Nurses). The fellowships are made on the recommendation of the School of Nursing, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter session).

#### **Derek Norton Thunderbird Rugby Award**

One or more awards, 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 friends and business colleagues of Derek Norton, for outstanding current or incoming student-athletes that display exemplary leadership, strong character and dedication to the sport of rugby. This award was established in recognition of Derek Norton's contributions to the real estate financing sector and his strong support, commitment and passion for rugby in Canada. The awards are made on the recommendation of the Head Coaches of the Men and Women's Rugby Teams, with review and approval by the Athletics' Awards Committee. (First Award Available in the 2019/2020 Winter Session.)

#### **Nicholas S. Sawchen Graduate Scholarship in Slavic Studies**

Scholarships totalling \$12,000 have been made available through an endowment established by an estate gift from Nicholas Stephen Sawchen for graduate students in the Faculty of Arts, who are pursuing research related to Slavic countries. The scholarships are made on the recommendation of the Faculty of Arts, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter session).

#### **Nicholas S. Sawchen Undergraduate Award in Slavic Studies**

Awards totalling \$2,600 have been made available through an endowment established by an estate gift from Nicholas Stephen Sawchen for undergraduate students in the Faculty of Arts who have excelled in a Slavic culture, language or literature course and are in good academic standing. The awards are made on the recommendation of the Department of Central, Eastern and Northern European Studies. (First award available for the 2019/2020 winter session)

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## **NEW AWARDS – ANNUAL**

### **Steve Alisharan Memorial Award**

A \$1,100 award is offered annually by friends, family and colleagues in memory of Steve Aliasharan (B.A. 1971, CPA) for Masters of Business Administration and Masters of Management students who have demonstrated leadership, community service and volunteerism. Steve taught at the UBC Sauder School of Business for over thirty years. He won several awards in recognition of his teaching, including the M.B.A. Teaching Excellence Award and the Arne Olsen Award for Career Teaching Excellence. Steve was integral to the development of the UBC M.B.A. Core program and the implementation of capstone projects in the M.B.A. and M.M. programs. This award was established in recognition of Steve's contributions to the UBC Sauder School of Business. The award is made on the recommendation of the UBC Sauder School of Business. (First award available for the 2019/2020 winter session).

### **BC Centre on Substance Use Medical Undergraduate Award**

A \$1,000 award is offered annually by the BC Centre on Substance Use (BCCSU) to a first-year M.D. student with outstanding academic achievement and demonstrated community involvement. Preference will be given to students who have shown a commitment to addiction medicine and/or working with populations affected by substance use. The BCCSU is committed to supporting education, clinical experience, and research in addiction medicine. They value the importance of providing training opportunities for clinician-scientists in addiction medicine. The award is made on the recommendation of the Faculty of Medicine. (First award available for the 2019/2020 winter session.)

### **Bursary for Teachers – University Courses in French**

Bursaries of up to \$2,000 are offered annually to graduate students enrolled in the French Master of Education in Modern Languages in the Faculty of Education. Recipients must be currently employed by a BC School district or independent school (including Teachers on Call) and enrolled in courses taught in French. The bursaries are adjudicated by the Department of Language & Literacy Education, in consultation with Enrolment Services. (First award available for the 2019/2020 winter session).



*Administrative note: The Ministry of Education has provided UBC with funding for these bursaries. The naming of this bursary does not follow agreed naming conventions but is based on the contract provided by the Ministry of Education for ease of administration.*

### **Butterfield Scholarship in Medicine**

Scholarships totalling \$6,900 are offered annually, through an endowment established by an estate gift from Hilda Dorothy May Butterfield and held at the University of Victoria, for outstanding M.D. students in the Island Medical Program at the University of British Columbia. The scholarship is made on the recommendation of the Faculty of Medicine. (First award available for the 2019/2020 winter session.)

### **Edna Dharmaratne Award in Linguistics**

An award of \$1,000 is offered annually by alumni, faculty, students and staff of the Department of Linguistics in honour of Edna Dharmaratne for undergraduate and graduate students in the Department of Linguistics who have achieved good academic standing and demonstrated volunteerism. Financial need may be considered. Edna Dharmaratne served as the Administrator of the Department of Linguistics from 1997 to 2017. She was the face and cornerstone of the Department, and is admired for strength of character and generosity. This award was established in recognition of Edna's legacy of compassion, competence and integrity. The award is made on the recommendation of the Department of Linguistics, and in the case of a graduate student, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter session).

### **Dr. Marion Porath Memorial Award in Voice and Opera**

Awards totalling \$3,000 are offered annually by Merv Porath in memory of his wife Dr. Marion Porath (B.Ed. 1974, M.A. 1984, Ph.D.) to two or more outstanding undergraduate or graduate students studying within the Voice and Opera division at the School of Music. Financial need may be considered. Professor Emerita Porath taught at UBC for 25 years and was an award-winning teacher, scholar, and researcher. Dr. Porath received her Bachelor of Education and Master of Arts degrees at UBC and earned her Ph.D. from the University of Toronto in 1988. Dr. Porath's arts-based research led to her work with the UBC Opera and young opera singers. The award is made on the recommendation of the Voice and Opera division in the School of Music and, in the case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available in the 2019/2020 winter session.)

### **Entrée Canada Centennial Indigenous Leaders Award**

A \$20,000 renewable entrance award is offered annually by Entrée Canada for First Nations, Inuit, or Métis undergraduate students of Canada entering university directly from secondary school or transferring from another post-secondary institution to an undergraduate program of study. Preference will be given to students from British Columbia. Recipients are academically



qualified with preference to students who 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 is the shorter period). Entrée Canada is a leading travel company based in Vancouver that specializes in creating exceptional experiences across Canada for their discerning clientele. Entrée Canada works to promote understanding and awareness of Indigenous history among their guests, and established this award to support future Indigenous leaders. The awards are made on the recommendation of the Centennial Scholars Entrance Award Committee. (First award available for the 2019/2020 winter session).

### **Leon and Joan Tuey Graduate Scholarship**

Scholarships totalling \$6,000 are offered annually by Leon and Joan Tuey for outstanding graduate students in the Faculty of Education. 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 2019/2020 winter session).

## **PREVIOUSLY APPROVED AWARDS WITH CHANGES IN TERMS OR FUNDING SOURCE**

### **Annual Awards**

#### **1460 – Rebecca Vecchio Memorial Award**

##### ***Rationale for Proposed Changes***

*The United Food and Commercial Workers Internal Union has increased their giving to support an additional award assignment for the upcoming academic year. An additional \$1,000 a year will be given to support two \$1,000 award for students.*

##### **Current Award Description**

A \$1,000 award is offered annually by UFCW Local 1518 for students who are committed to gender equality in actions and behaviours and who advocate against bullying and violence against women. The award is for students who demonstrate these ideals through action by working to foster a safer and more respectful campus community. Recommendations are made by the Equity and Inclusion Office and the Sexual Assault Prevention Team in consultation with Enrolment Services.

##### **Proposed Award Description**

A Two \$1,000 awards **is** are offered annually by UFCW Local 1518 for students who are committed to gender equality in actions and behaviours and who advocate against bullying and violence against women. The awards **is** **are** for students who demonstrate these ideals through

action by working to foster a safer and more respectful campus community. Recommendations are made by the Equity and Inclusion Office and the Sexual Assault Prevention Team in consultation with Enrolment Services.

## Appendix B: Curriculum Report

### FACULTY OF ARTS

#### *New courses*

**ASIA 436 (3)** The Partition of India in Film and Narrative;  
**CHIN 195 (1)** Chinese Characters I;  
**GERM 105 (6)** Intensive Beginners' German;  
**GERM 121 (3)** German Fairy Tales and Popular Culture (in English);  
**GERM 404 (3)** Religion and German Literature (in English);  
**RUSS 303 (3)** Topics in Russian Culture (in English);  
**SOCI 230 (3)** Shopping, Society, and Sustainability

### FACULTY OF EDUCATION

#### *New courses:*

**KIN 432 (3)** Sport Nutrition;  
**KIN 459 (3)** Psychobiology of Physical Activity

### FACULTY OF LAND AND FOOD SYSTEMS

#### *New course*

**FRE 474 (3)** Economics of Global Resource Use and Conservation

#### *Revised program option*

LFS>Dual Degree and Minor Options> Master of Management Dual Degree Program Option

#### *Discontinuation of admittance into a major*

LFS>B.Sc. in Food, Nutrition, and Health>Food Market Analysis Major

### FACULTY OF SCIENCE

#### *New courses*

**BIOC 470 (3)** Biochemistry & Society: Current Issues;  
**BIOL 314 (3)** Elements of Biodiversity;  
**CHEM 250 (3)** Inorganic Chemistry for Engineers;  
**CPSC 330 (3)** Applied Machine Learning;  
**CPSC 427 (3)** Video Game Programming;  
**EOSC 410 (3)** Geoscientific Data Analysis and Empirical Modeling;  
**ENPH 353 (3)** Engineering Physics Project I;  
**FSCT 398 (3)** Co-op Work Placement I;  
**FSCT 399 (3)** Co-op Work Placement II;  
**FSCT 412 (3)** Instrumental Analysis for Forensic Chemistry;  
**FSCT 498 (3)** Co-op Work Placement III;  
**FSCT 499 (3)** Co-op Work Placement IV;  
**GEOB 408 (3)** The Changing Cryosphere;  
**GEOB 409 (3)** Advanced Field Studies in Geographical Sciences;  
**ISCI 461 (3)** Comparative Field Research Course: Systems Approaches to Regional Sustainability;  
**MICB 413 (3)** Topics in Microbiome Research



15 May 2019

To: Vancouver Senate

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

Re: **Annual Report** (information)

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Please find attached the 2018-19 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](mailto:christopher.eaton@ubc.ca).

Respectfully submitted,

Dr. Perry Adebar, Chair

Council of Senates Budget Committee -Vancouver Sub-Committee

## **Council of Senates Budget Committee – Vancouver Sub-Committee**

Report to Senate – May 15, 2019

### **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 2018-2019 is as follows:

Dr. Perry Adebar, Chair, 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)  
Mr. Séan Haffey, Convocation member of Senate  
Ms. Marium Hamid, Student Representative (Arts)  
Dr. Anna Kindler, Elected by the Joint Faculties (Education)  
Mr. Matthias Leuprecht, Student Representative (Arts)  
Dr. Peter Marshall, Faculty of Forestry  
Dr. Mark Thachuk, Faculty of Science

### **Report on Activities**

The Committee met regularly over the course of the 2018-19 academic year with the Provost and Vice-President Academic, the Vice-President Finance and Operations, Vice-Provost and Associate Vice-President, Enrolment and Academic Facilities, 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 seven times in 2018-19, including one joint meeting with the Senate Academic Building Needs Committee. 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 2018-19 academic year include the following:

#### **1. Portfolio Priorities for the Office of the Provost and Vice-President, Academic**

Presenter: Andrew Szeri, Provost

*Summary: Provost highlighted current priorities such as: (i) Establish the Academic Capital Fund – allocate budget to service the debt on academic capital projects such as classrooms, research laboratories, instructional laboratories and faculty offices; (ii) Support faculties creating new academic programs; (iii) Long-range enrolment plan – looking at enrolments of domestic and international students over the last 10 years and looking forward into the future; (iv) With the VPFO, develop a ‘bank’ so that Faculties and other units can “park” funds that they have accumulated and for which they have a specific and planned purpose; (v) Support the implementation of the Indigenous Strategic Plan related to admissions and advising, Indigenous research support initiative and other items.*

## **2. Key Priorities for the Office of the Vice-President, Finance and Operations**

Presenter: Peter Smailes, Vice-President, Finance and Operations

*Summary: (i) Leadership of Integrated Renewal Program; (ii) Capital Plan – incorporate academic priorities, seismic priorities, IT priorities, downtown expansion, and potential off campus administrative space solutions; (iii) Long Term Financial Plan – linked to multi-year enrolment and tuition plans and the Capital Plan; (iv) Build and Lead the Finance and Operations Team – fill vacant Treasurer position, recruit new director for Risk Management Services, strengthen connections between various portfolios.*

## **3. Outlook of UBC 2019/20 Operating Budget**

Presenters: Peter Smailes, Vice-President, Finance and Operations and Andrew Szeri, Provost and Vice-President, Academic

*Summary: an overview of funds available for allocation in the 2019/20 fiscal year and finance strategy for the IRP initiative. Discussion focused on the modified tuition allocation model and pre-committed funding allocations*

## **4. Faculty Home Ownership Equity Sharing Plan**

Presenter: Peter Smailes, Vice-President, Finance and Operations

*Summary: an overview of UBC Housing Action plan and proposed Equity Share Pilot Program (ESPP) developed to help increase faculty's buying power in the market place discussion.*

## **5. Overview of Capital Projects – Joint Meeting with Senate Academic Building Needs Committee**

Presenters: John Metras, Associate Vice-President, Campus Facilities and Jennifer Sanguinetti, Managing Director, Infrastructure Development

*Summary: Building activity on both campuses include thirteen major building projects currently in design or construction, and 10 major building projects completed since 2017. Funding for Academic building projects comes from multiple sources including government, fundraising, self-funding and university (faculty or central) contributions. Discussion topics included sustainability of facilities and construction costs.*

## **6. Capital Planning and Prioritization Process – Joint Meeting with Senate Academic Building Needs Committee**

Presenters: John Metras, Associate Vice-President, Campus Facilities and Jennifer Sanguinetti, Managing Director, Infrastructure Development

*Summary: Capital investment governance at UBC is split into two streams, one for information technology investment and one for facilities investment. Depending on the stream, proposals will work their way up through different planning committees and working groups, which will make recommendations. Ultimately, decisions are made by the Executive and the Board of Governors.*



## 8. Budget 2019/2020

Presenter: Andrew Szeri, Provost and Vice-President Academic

*Summary: overview of the overall operating budget was presented. Operating and Excellence Fund budget requests were grouped into three categories to facilitate prioritization of asks: Category A – Highest priority, committed / confirmed, Category A+ – High priority, pending consultation, and Category B – Medium priority. Committee members provided feedback as to which Category A+ requests they felt should receive funding.*

## 9. Overview of UBC Properties Trust (UBCPT)

Presenter: Aubrey Kelly, President & CEO

*Summary: An overview of mission and work of UBCPT, including members of the Board, organization, principles for land development and main areas of operation (institutional construction, servicing and land leasing, rental housing, and commercial development). Discussion topics included earnings from prepaid leases, and services to support growth.*

## 10. Update on Capital Planning and Prioritization Process

Presenter: John Metras, Associate Vice-President, Campus Facilities

*Summary: Prioritization criteria was modified to include only the four core areas of UBC's Strategic Plan: People & Places, Research Excellence, Transformative Learning, and Local & Global Engagement. Cross-cutting themes (Collaboration, Inclusion, Innovation) were then incorporated into the core areas. Projects proposed for the 5-year Capital Plan and/or Academic Building Fund were highlighted*

## 11. Overview of UBC Investment Management Trust (IMANT)

Presenter: Rajiv Silgado, President & CEO

*Summary: An overview of the work of IMANT, including mission statement, members of the Board, governance structure and process, reporting responsibilities and communication and investment guidelines. Discussion topics included performance of both the endowment and sustainable pools, as well as possible future commitments and investments in the sustainable pool.*

## 12. Development & Alumni Engagement Services

Presenter: Ana-Maria Hobrough, Managing Director

*Summary: this presentation will take place on May 15<sup>th</sup> therefore a summary cannot be provided on the May 15<sup>th</sup> report to Senate.*

## 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, including: faculty tuition allocation, enrolment planning, fossil fuel divestment, funding for the Integrated Renewal Plan, hybrid programming, management and performance of endowment and sustainable pools and future institutional development needs (e.g. classroom, labs & office space, community & retail services). The student, convocation 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.



25 April 2019

To: Vancouver Senate

From: Okanagan Senate

Re: Memorial Minute

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The Okanagan Senate has asked me to send to you the memorial minute they approved for Dr W. Wesley Pue, a former member of the Okanagan Senate and a Faculty Member in the Peter A. Allard School of Law.

Respectfully submitted,

Dr. Kathleen Ross  
Secretary to Senate



## PROFESSOR W. WESLEY PUE

W. Wesley Pue is widely recognized as one of Canada's leading legal historians; a renowned lawyer, academic and the Nemetz Professor of Legal History at the Peter. A. Allard School of Law.

Professor Pue was educated in England at Gresham's School, Holt and then at Regent's Park College, University of Oxford, completing a Bachelor of Arts in Geography (1977), followed by a Bachelor of Arts in Jurisprudence (1979). Relocating to Canada shortly thereafter, he completed a Master of Laws at the University of Alberta in 1980. He taught at Osgoode Hall Law School, Oklahoma City University, and Carleton University. At the University of Manitoba, he was Johnson Professor of Legal History and the Director of the Canadian Legal History Project.

Professor Pue joined UBC's Faculty of Law in 1993, and was the first holder of the Nemetz Chair in Legal History. From 1996 to 1998, he was the director of UBC's graduate program in Law. He also served as Associate Dean for Graduate Studies and Research (2003-2007), acting Director of the Individual Interdisciplinary Studies Graduate Program, Vice-Provost (Vancouver Campus, 2007-2011), and Provost (Okanagan Campus, 2011-2013).

Called to the Bars of the Northwest Territories and Alberta and an honorary member of the Honourable Society of the Inner Temple, Professor Pue held faculty positions or visiting professorships in Canada, the USA, England, and Australia and served as President of the Canadian Law and Society Association.

Professor Pue's research and publications focused primarily on legal history, law and society, law and colonialism, constitutionalism, policing, and national security. He served as the General Editor for Canada's "Law and Society" book series, published by UBC Press. His book *Law School: The Story of Legal Education in British Columbia* is widely recognized as an extraordinary contribution to the recorded history of the law school.

During his years at UBC, Professor Pue made many meaningful and lasting contributions, to his students, his Faculty and the University. He championed the Faculty's graduate research programs and was a mentor to two generations of legal historians and scholars of legal education and the legal profession. He was instrumental in the establishment of the LLM Common Law degree program.

To his family and friends, the Senate and the University of British Columbia offer their condolences and thanks.

To: Senate

From: Academic Building Needs Committee

Date: 15 May 2019

**Re: Annual Report on the Activities of the Senate Academic Building Needs Committee**

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Attached please find for your information the 2018-19 Annual Report of the activities of the Senate Academic Building Needs Committee.

Respectfully submitted,

Dr. Michael Isaacson, Chair  
Senate Academic Building Needs Committee

**The University of British Columbia  
Senate Academic Building Needs Committee**

**Annual Report to Senate, 2018 - 2019**

**Committee members:** Adlai Fisher, Katie Gourlay (student), Séan Haffey (Convocation), Michael Isaacson, André Ivanov (Joint Faculties), Philip Loewen (Science), Sarah Ngo (Convocation), Nick Pang (student), Pam Ratner (Vice-Provost and Associate Vice-President, Enrolment and Academic Facilities), Kate Ross (Associate Vice-President, Enrolment Services and Registrar), Thomas Schneider (Graduate and Postdoctoral Studies), Mike Stewart (Convocation), Christian Surniawan (student), Lisa Wang (Student)

**Committee Activities**

The Committee undertakes a significant portion of its activities through engagement in consultation processes on a range of relevant plans, projects and topics. Such consultations occur in three ways:

- Through presentations to the SABNC.
- 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.)
- Through meetings of the Capital Planning Working Group (CPWG). (The SABNC Chair is a member of CPWG.)

In addition, the Committee completed a study of UBC Vancouver's learning spaces delivered to Senate at its February 2019 meeting. The study entailed three presentations to the Committee, an analysis of classroom usage, and a consultation process involving feedback in writing and through an open forum. The report found that the relevant units provide an outstanding level of service

and that the quality of learning spaces overall is excellent. The report provided a number of suggestions for improvement.

Finally, the Committee has interacted with Enrolment Services with respect to its scheduling project that is currently underway. Recently, the SABNC Chair has been appointed as Chair of the Steering Committee for that project.

Overall, during the 2018-19 academic year, the Committee held 7 meetings, including a joint meeting with the Vancouver Sub-Committee of the Council of Senates Budget Committee, and it participated in 4 meetings of PPAC. In addition, on behalf of the Committee, the Chair attended a meeting of CPWG. A list of presentations heard by the Committee is provided in Appendix I to this report.

### **Committee 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. As well, the Committee chair is a member of the Capital Planning Working Group and thereby provides, on behalf of the Committee, more direct input to this prioritization process.

*Approval Process.* For projects valued at over \$5M, the capital project approval process entails three levels of Executive approval and three levels of Board approval (see Board Policy 126, *Capital Projects, Capital Purchases and Internal Loans*). The Committee (via PPAC) is typically consulted prior to Executive 3 approval.

## **Appendix I – Presentations to the Committee**

The following presentations were made to the Committee during the 2017/18 academic year:

18 September 2018 – *Scheduling of General Teaching Space* (Annie Yim, Associate Registrar, Student Records and Systems Management, Enrolment Services, Oana Toma, Senior Manager, Scheduling and Special Projects, Enrolment Services)

16 January 2019 (Joint Meeting with Council of Senates Budget Committee Vancouver Sub-Committee) – *Current Capital Project Portfolio* (John Metras, Associate Vice-President, Infrastructure Development, Jennifer Sanguinetti, Managing Director, Infrastructure Development)

16 January 2019 (Joint Meeting with Council of Senates Budget Committee Vancouver Sub-Committee) – *Major Capital Planning* (John Metras, Associate Vice-President, Infrastructure Development; Jennifer Sanguinetti, Managing Director, Infrastructure Development)

16 April 2019 – *Accessibility in Academic Buildings* (Janet Mee, Director, Centre for Accessibility; Jodi Scott, Senior Learning Space Planner, Facilities Planning, Infrastructure Development)

### **Property and Planning Advisory Committee (PPAC) Meetings PPAC Items for Recommendation:**

19 February 2019 – *Water Pump Station Relocation* (Jennifer Sanguinetti, Managing Director, Infrastructure Development)

### **Property and Planning Advisory Committee (PPAC) Meetings PPAC Information Items:**

16 October 2018 – *Stadium Neighbourhood* (Joanne Proft, Associate Director, Community Planning, Campus and Community Planning)

18 December 2018 – *Housing Action Plan and Neighbourhood Planning* (Michael White, Associate Vice-President, Campus and Community Planning; Lisa Colby, Managing Director, Faculty Staff Housing & Relocation Services, Office of the Vice-President Academic; Tor Album, Associate Treasurer, Treasury; Aubrey Kelly, President & CEO, UBC Properties Trust)

19 February 2019 – *Campus and Community Planning Engagement Charter – 2018 Annual Review* (Aviva Savelson, Acting Senior Manager, Public Engagement, Campus and Community Planning)

16 April 2019 – *Capital Planning and Prioritization Process 2019 Consultation* (John Metras, Associate Vice-President, Infrastructure Development; Jennifer Sanguinetti, Managing Director, Infrastructure Development)



03 May 2019

To: Vancouver Senate

From: Senate Academic Policy Committee

Re: *Policy V-135 – Academic Concession*

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The Senate Academic Policy Committee is pleased to present to Senate for its consideration *Policy V-135 - Academic Concession*. This is a revision of the policy currently found in the [Academic Calendar](#). The revised policy sets out the types of situations that may arise leading to students' requests for concession, including unanticipated conflicting responsibilities, temporary illnesses or other compassionate grounds that may hinder their attendance, participation in class or examinations, or the completion of assignments or other requirements. It also articulates the expectation that under normal circumstances students will manage their various private commitments so as to avoid creating conflicts with their academic responsibilities.

For the most part, the revised policy formalizes and makes clear current practice. However, there are a number of places where additional guidance is provided to align practice with current circumstances and understanding. For instance, the revisions incorporate considerations of Board Policy #131 – Sexual Assault and other Sexual Misconduct and reflect attention toward the impact that requests for medical notes can place upon the health services of the University and the Province.

This proposal was developed by a working group chaired by Senator Holmes, who is a member the Academic Policy Committee. The group included academic advisors, students, administrative leaders in the fields of student health, wellbeing and accessibility, the Ombudsperson for Students, and faculty. The group met many times from fall 2018 through spring 2019 with logistical assistance from the AMS and support from the Senate Office.

A community-wide consultation on a previous draft policy was conducted on-line by the Senate Office over the month of March. It resulted in over 100 responses, either through a survey or through written comments. The survey results showed overwhelming support both for the philosophy underpinning the proposed policy and for the general content. Written comments highlighted some important issues and suggested areas for clarification, notably the range of potential grounds for concessions, the need for consistency between the language in the proposed policy and other UBC policies, the differences between the authorities who grant concessions for undergraduates and for



graduate students, the language that guarantees that information revealed by students will be treated as confidential, and the avenues of appeal open to students who are denied concessions. The working group considered carefully all of the feedback and consulted University Counsel to ensure that the proposed language would not unduly open the University to appeals.

If the policy is approved by Senate, there will be further work over the summer months by an implementation team to develop a series of FAQ's, one or more self-declaration forms to be used by students, and a communication strategy (in collaboration with the Student Communications group that reports to the VP Students and to the Registrar).

The Committee has reviewed the policy put forward by its working group and recommends the following:

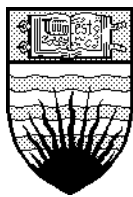
**Motion:**       *“That Senate approve Policy V-135 – Academic Concession as set out in the attached.”*

Respectfully submitted,

Dr. Paul Harrison, Chair

Senate Academic Policy Committee

## THE UNIVERSITY OF BRITISH COLUMBIA

**SENATE POLICY:**  
V-#135**VANCOUVER SENATE**  
c/o Enrolment Services  
2016 - 1874 East Mall  
Vancouver, B.C. Canada V6T 1Z1V-135: *Academic Concession***Effective Date:**

1 September 2019 (anticipated)

**Approval Date:**

15 May 2019 (anticipated)

**Review Date:**

This policy shall be reviewed 5 years after approval and thereafter as deemed necessary by the *responsible committee*.

**Responsible Committee:**

Academic Policy Committee

**Authority:***University Act, S. 37(1)*

*“The academic governance of the university is vested in the senate and it has the following powers:*

*(d) to determine the conditions under which candidates must be received for examination, to appoint examiners and to determine the conduct and results of all examinations;*

*(g) to provide for courses of study in any place in British Columbia and to encourage and develop extension and correspondence programs;*

*(h) to provide for and to grant degrees, including honorary degrees, diplomas and certificates of proficiency, except in theology;*

**Purpose and Goals:**

This policy articulates the University’s commitment to support students in their academic pursuits through the application of *academic concessions* in the event

that students experience unanticipated events or circumstances that interfere with their ability to accomplish academic work.

When considering requests for *academic concessions* the University applies principles of transparency, flexibility, and compassion. Fairness is achieved by applying this policy and its procedures in a flexible manner; however, it is recognized that fair treatment is not necessarily equal treatment in all circumstances. Flexibility allows decision-makers the reasonable exercise of discretion, sound judgement, and compassion in response to the unique circumstances of an individual student's case. In responding to students' requests for *academic concessions*, the University upholds the academic standards of the curriculum and expects that the requirements of each *course* or academic program will be met.

Following these principles, this policy is designed to set out the circumstances under which *academic concessions* may be granted to students, which types of *academic concessions* may be granted to students under various situations and by whom, as well as requirements and procedures for submitting and responding to student requests for *academic concessions*.

### **Applicability:**

This policy applies to all students registered in credit *courses* and programs provided by the Vancouver Campus of the University, including graduate students registered in theses and dissertations, which may bear zero credits.

### **Exclusions:**

Residents and Visiting International Research Students are not included in this policy. Persons in these categories who face unexpected circumstances should contact their immediate supervisor to make suitable arrangements.

### **Definitions:**

For the purposes of this policy and in all other policies in which they are not otherwise defined:

- *Academic Concession* shall mean the provision of a variance in the timing or nature of a course or program requirement on the basis of one of the grounds defined in this policy.
- *Academic Advising Office* shall mean for undergraduate students, students in professional programs, and graduate students in programs administered by disciplinary faculties, the *academic advising office* or unit in the student's home faculty or school, or the dean's office in faculties where there is no *academic advising office*. For graduate students in programs administered by the Faculty of Graduate and Postdoctoral Studies, *academic advising office* shall mean the Office of the Dean and Vice-Provost, Faculty of Graduate and Postdoctoral Studies.



- *Course* shall mean course of instruction.
- *Dean* shall mean the dean of the student's home faculty (or the dean's designate), and for graduate programs administered by the Faculty of Graduate and Postdoctoral Studies, the Dean and Vice-Provost of Graduate and Postdoctoral Studies, except in cases of a student appeal of the decision of a course instructor when dean shall mean the dean of the faculty offering the course or the dean's designate.
- *Graduate Supervisor* shall mean the faculty member with primary responsibility for overseeing a graduate student's program of study.
- *Graduate Advisor* shall mean the appointed faculty member in a graduate program who takes administrative responsibility for ensuring that faculty supervising or teaching graduate students, and graduate students are aware of, and adhere to, applicable policies and procedures. The *graduate advisor* acts as the primary liaison with the Faculty of Graduate and Postdoctoral Studies.
- *Instructor* shall mean the instructor of record for a course or the supervisor responsible for a practicum, internship, or field work.

### Policy:

- 1) Students facing circumstances that constitute grounds as set out in Section 3 may submit a request for *academic concession*. Students are responsible for submitting their requests as soon as possible.
- 2) Requests for academic concession may be made to the *instructor* of the student's *course*, their *graduate supervisor* or *graduate advisor* for their graduate program, or the *academic advising office* of their academic unit as appropriate and as set out in the attached procedures. If concurrent *academic concessions* are sought in more than one *course*, the request should be made directly to the *academic advising office* or equivalent.
- 3) Requests for *academic concessions* shall be determined on a case-by-case basis and in a timely manner by the *instructor*, *academic advising office*, or *dean* (on the recommendation of the *graduate supervisor* or *graduate advisor* for graduate students in programs administered by the Faculty of Graduate and Postdoctoral Studies). For graduate students in programs administered by Faculty of Graduate and Postdoctoral Studies, all requests resulting in a change to the student academic record must be directed to the Dean and Vice-Provost of Graduate and Postdoctoral Studies.
- 4) Determination of whether to grant an *academic concession* and which type of *academic concession* is most appropriate will depend on the student's individual circumstances. One or more of the following considerations may apply:
  - the nature and duration of the issue affecting the student;
  - confidential consultation with other appropriate units that can provide professional opinion on the student's situation;

- the scope and type of academic work affected;
  - the proportion of prescribed academic work having been completed at the point in the term or program when academic work is affected; and,
  - the student's achievements in the course or graduate or professional program to date.
- 5) Providing an *academic concession* shall not lower the academic standards of UBC, its courses, or its programs, and shall not remove either the need for evaluation or assessment or the need for the student to meet essential requirements.
- 6) Courses and programs with continuous assessment and those that assess the development of graduate attributes and standards of professional conduct and of patient care may be constrained in the form of *academic concession* they can offer.
- 7) In some credit courses, such as some practica, internships, and field-work courses, there may be steps required for approval and authorities involved in requests for academic concessions in addition to those described in this policy.
- 8) *Grounds for Academic Concession*

Grounds for *academic concession* exist when one or more of the conditions below unexpectedly or unavoidably leads to a situation or conflict that hinders participation or attendance at a class session or examination, or an inability otherwise to fulfil the requirements of a course or academic program in a timely manner, particularly where the requirements are assessed as part of a grade.

Grounds for *academic concession* may exist when a student enters an academic term but may also arise when a student's circumstances change unexpectedly during the term.

Where a request for an *academic concession* has been found to be based on a protected ground covered by the BC Human Rights Code, the University has a duty to grant an *academic concession* unless doing so will create undue hardship (as that term has been interpreted under BC law) for the university. Other university policies may apply in these circumstances (see Related Board Policies: [#3](#), [#65](#), and [#131](#) and Joint Board and Senate Policy [#73](#)).

Grounds for *academic concession* fall into one or more of the following categories:

- a) *Conflicting Responsibilities*

It is a student's responsibility to arrange their scheduled non-academic activities to the best of their ability in a manner that enables full attendance and participation in their *courses* and programs, including required practica and internships.

Conflicting responsibilities do not include travel or social plans that conflict with class or exam schedules unless the travel is related to another valid ground for *academic concession*.

Conflicting responsibilities that create grounds for *academic concession* are beyond the student's control and normally arise after the student has registered in *courses*. Examples include:

- i. being absent from campus to represent the University, British Columbia or Canada in a competition or performance
- ii. attending meetings required as a member of a University governance body
- iii. being called to serve in the military
- iv. needing to work to support oneself or one's family but only when the need changed after the student registered in the *course*
- v. a change in the need to provide care for a dependant or family member
- vi. being required to attend a court session (e.g., as a witness, jury member, plaintiff or defendant)
- vii. being required to attend a hearing on a matter of university discipline or academic standing
- viii. being required to report to a government office for immigration or citizenship proceedings
- ix. participating in a religious observance (see Board Policy [#65](#))

Other conflicting responsibilities that can be foreseen may also/occasionally create grounds for *academic concession* (e.g., attending an academic conference or professional development opportunity). In these situations, students must consult their *instructor* or *graduate supervisor* or *graduate advisor* or their *academic advising office* as appropriate.

b) Medical Circumstances

Medical circumstances that create grounds for *academic concession* are normally unanticipated and include, but are not limited to, the following:

- i. Acute physical or mental illness or a medical circumstance that emerges or recurs during a term
- ii. The emergence of, or a change in, a chronic physical or mental health condition

Students with disabilities eligible for academic accommodations under Joint Board and Senate Policy [#73](#) are required to work with the Centre for Accessibility in this regard. The Centre is available for consultation with students, instructors, and

advisors of all types if it is unclear whether a medical circumstance qualifies for academic concession, especially where the student's temporary illness or injury has persisted for more than one academic term. Students who are experiencing the emergence of a chronic condition may work directly with an *academic advising office*.

c) Compassionate Grounds

Compassionate grounds for *academic concession* may arise in the immediate aftermath of an unanticipated event, or later. Examples include:

- i. a traumatic event experienced by the student, a family member, or a close friend
- ii. an act of sexual assault or other sexual misconduct experienced by the student, a family member, or a close friend
- iii. a death in the family or of a close friend

9) Types of *Academic Concessions*

There are numerous types of *academic concessions* and the list below is non-exhaustive. The *instructor*, *academic advising office*, or *graduate supervisor* or *graduate advisor*, or *dean* or designate will determine the most appropriate *academic concession* to apply in a given situation, depending on the grounds and the situation of the student according to the procedures set out in this policy and where applicable, additional procedures set out by the faculty.

a) In-term Concessions

An *instructor* (or *academic advising office* where appropriate) can provide one or more options to students who miss a marked assignment, test, or deadline. The options for each course should be identified in the course syllabus. Examples include, but are not limited to, provision of make-up tests, reweighting of missed marks to a later test or assignment, provision of an alternative means of fulfilling a participation or presentation requirement, or allowance for a maximum number of class discussions or quizzes to be missed. In-term concessions are not reflected on the student's transcript.

b) Late Withdrawal

Late withdrawal from one or more *courses* is granted by the student's *Dean* or director or their designate (such as an *academic advising office*), but not by an *instructor*. A student may be granted withdrawal from a course after the withdrawal deadline (with "W" standing) when the student has not met *course* requirements during the term but has valid grounds for *academic concession* that address the reasons for the lack of demonstrated achievement. A student will not normally be granted late withdrawal if the final examination has been sat or final assignment completed.

For the provisions for late withdrawal from all registered *courses* or from a program, see “[Withdrawal](#)”. Granting late withdrawal from a term or a program may be contingent on a plan co-developed by the student, an *academic advising office*, a *graduate supervisor* or *graduate advisor*, and other support services as appropriate. The plan may set conditions to be met before the student can be re-admitted and resume studies. An application for readmission must be made by the published application deadline for the program (see [Readmission](#)).

While a student is the subject of academic discipline proceedings, withdrawal is not an available concession in the course in which the matter of discipline is being considered.

c) Deferred Standing

Deferred standing is granted by the student’s *dean* or director or their designate (such as an *academic advising office*), but not by a course *instructor*. For the provisions for deferral of a final examination or assignment beyond end of term (i.e., approval to write the missed examination or submit the assignment later) see [Standings](#).

d) Aegrotat Standing

See [Standings](#).

e) Adjudicated Pass

See [Standings](#).

f) Retroactive Course Drop

The academic transcript should be a true representation of the student’s relationship with the university. In exceptional cases, normally involving extraordinary compassionate or medical grounds, a *dean* may remove a student’s registration in a *course* from the academic record. Examples include:

- The student was incapable of withdrawing themselves by the withdrawal deadline
- The occurrence of severe trauma

Such a concession is not granted to accommodate a student’s desire for a tuition rebate; for such purposes, there is a process whereby a student who, for extenuating circumstances, withdrew from a *course* or was withdrawn as a concession can appeal for a partial tuition refund (see [tuition refund](#)).

10) Documentation for *Academic Concession* requests

In all cases, students’ requests for *academic concession* should be made as early as reasonably possible, in writing, to their *instructor*, *graduate supervisor* or *graduate advisor*, or *academic advising office* or equivalent in accordance with the

procedures for this policy and those set out by the student's faculty/school. These requests should clearly state the grounds for the concession and the anticipated duration of the conflict and or hindrance to academic work. In some situations, this self-declaration is sufficient but the submission of supporting documentation may be required along with, or following, the self-declaration.

a) Documentation for Conflicting Responsibilities

Supporting documentation should normally be provided in support of requests for *academic concessions* on the grounds of conflicting responsibilities. A self-declaration may be sufficient where there is no practicable way to provide a letter or other official document from an organization relevant to the conflict.

In the case of an *academic concession* for care for a family member or for a religious observance, the University does not require documentation. However, advance notice of interference with academic activities should be provided by the student as soon as reasonably possible and in the case of a religious observance, no later than two weeks in advance (see Board Policy #65).

b) Documentation for Medical Circumstances

For first occurrences of an acute illness likely to be quickly resolved without seeing a health professional, a self-declaration will suffice. Health professionals are not able to provide meaningful reports for students who have not been under their care prior to the illness.

If a student makes a second or subsequent request to an *instructor* for *academic concessions* resulting from acute illness, the *instructor* will refer the student to their *academic advising office* or *graduate supervisor* or *graduate advisor*. Students who are experiencing the emergence of a chronic condition may work directly with a faculty or school *academic advising office*, or *graduate advisor*, or *dean* as appropriate. In such cases, the student may be asked to provide documentation to ensure that underlying health issues are being monitored properly.

If the student is not registered with the Centre for Accessibility, the *academic advising office* or *graduate supervisor* or *graduate advisor* may seek the advice of the Centre regarding documentation submitted.

c) Documentation for Compassionate Grounds

When a student first seeks *academic concession* on compassionate grounds, a self-declaration will suffice. As traumatic events may show effects long after the occurrence of the event, a self-declaration may also suffice for the first incidence where re-traumatization arises. If a prolonged absence is anticipated on compassionate grounds, supporting documentation may be requested. Documentation can be provided by a professional or unit that can assess the effect of the event on the student.

If documentation is requested, it must come from a support unit or professional able to speak to the impact on the student. The *academic advising office* or *graduate supervisor* or *graduate advisor* or equivalent with input from the instructor then determines the appropriate concession that best supports the student's wellbeing and academic progress, through direct communication with the student, ensuring that the student understands the alternatives and their implications.

#### 11) Confidential Sharing of Information

Whether the student first consults their *academic advising office* or *graduate supervisor* or *graduate advisor* or instead another source of support either within or outside UBC, all communications are governed by the Freedom of Information and Protection of Privacy Act.

A third-party authorization is needed if the student wishes to authorize a person or unit external to UBC to speak with any member of the University on their behalf.

#### 12) Appeals

- a) If a student believes that their request for an in-term concession has been unfairly denied, they are encouraged to take their protest to the head of the academic unit (often a department) that offers the course who will consult the course *instructor*, their *academic advising office*, *graduate supervisor* or *graduate advisor* and any other applicable service unit before making a decision. If the complaint is not resolved there, the student may take it to the *dean* of the faculty, director of the school responsible for the *course*, or Dean of the Faculty of Graduate and Postdoctoral Studies in accordance with the [Academic Calendar regulations on protests for academic standings](#).
- b) Students who are denied *academic concession* by their *academic advising office* or *graduate supervisor* or *graduate advisor* (or other designate of the dean or director) may appeal the decision if they feel that policy was not applied appropriately. See [Senate Appeals on Academic Standing](#).

#### 13) Procedures

The Senate Academic Policy Committee may set procedures under this policy to assist with its implementation and interpretation.

#### Calendar Statement:

As above.

#### Consultations

The following groups were consulted during the development of this policy:

AMS; Academic Advisors; Centre for Accessibility; CTLT; Deans, Directors and Unit Heads; Enrolment Services; UBC Community via Senate Website and UBC Today newsletter, VP Students' Office (Student Development and Services); Office of the Ombudsperson; Office of University Counsel

### **History:**

This is the first enumerated version of the policy for Academic Concessions using the approved policy template. The previous versions of this policy have been found in the Academic Calendar with the latest version having been reviewed by Senate in January of 2002. Earlier versions were considered by Senate in December 2000 and February 1994. Prior to 1994, the subject matter was included under the heading "Medical, Emotional or other problems".

### **Related Policies:**

[Board Policy #3 – Discrimination and Harassment](#)

[Board Policy #65 – Religious Holidays](#)

[Joint Board and Senate Policy # 73 -Accommodations for Students with Disabilities](#)

[Board Policy #131- Sexual Assault and other Sexual Misconduct](#)

[Senate Policy V-130 – Content and Distribution of Course Syllabi](#)

[Senate Policy V-302.2 – Graduate Student Leaves of Absence](#)

[Senate Policy V-303- Graduate Student Parental Accommodation Policy](#)

[Senate Appeals on Academic Standing](#)

[Attendance](#)

[Change of Registration](#)

[Grading Practices](#)

[Readmission](#)

[Withdrawal](#)

### **Appendix**

There is no appendix to this policy.



## Procedures:

These procedures can be amended from time to time by approval of the Vancouver Senate Academic Policy Committee.

### 1. General Considerations

- a. Faculties may vary the procedures and practices they implement to facilitate the submission and determination of requests for *academic concession*; however, in so doing they will adhere to the principles and provisions of Policy V-135.
- b. Course *instructors* are normally responsible for responding to requests from students who miss required assignments, tests, or deadlines during the term. The options for making up for missed work should be described in the course syllabus. If the *instructor's* academic unit manages such inquiries centrally (i.e., in the *academic advising office* or *dean's* office of the instructor's home faculty or school or by the *graduate advisor* for the student's program), that information should also be provided to students.
- c. Students are expected to pay timely attention to life events that disrupt normal participation in academic work and are urged to contact their *instructor*, *graduate supervisor* or *graduate advisor*, or *academic advising office* as soon as possible upon realizing that they require an *academic concession*.
- d. *Instructors* are strongly encouraged to make clear in their course syllabi the provisions for missed/late work and the potential penalties that students may incur.
- e. Other issues may require the intervention of the student's home *academic advising office*, either directly or with input from another support unit.
- f. In some circumstances related to the BC Human Rights Code the University may have a duty to inquire even if the student has not requested an *academic concession*.

### 2. Students must plan so as to avoid when possible conflicts with academic requirements

- a. When registering for *courses*, students who know they have commitments outside their academic studies are expected to try to schedule those commitments and their academic courses so as to avoid conflicts. This includes checking the schedules for the start and end dates of each upcoming term and of the term-end formal examination periods.
- b. Once a term starts, students should use their course syllabi to anticipate any possible conflicts between course requirements (e.g., dates of tests) and their outside commitments. If detail of a *course* schedule in the syllabus is not sufficient, students must ask the course *instructor* for more information (see [Policy V-135: Content and Distribution of Course Syllabi](#)).
- c. If efforts under a. and b. above do not avoid all conflicts, students should look in the *course* syllabus for information on options for meeting *course* requirements when a required activity is missed (as required under [Policy V-135: Content and Distribution of Course Syllabi](#)). If options are not provided in the syllabus, students must discuss options with the relevant *course* instructor(s).

- d. Students who are registered with the Centre for Accessibility must provide each course *instructor* with the requisite letter describing the required accommodation (see [Joint Board and Senate Policy #73 –Accommodation for Students with Disabilities](#)).

### 3. Managing Unanticipated Disruptions During a Term

- a. Missing one or only a few classes, tests, or deadlines:
- Students who miss required course or program activities over a short period for reasons of a medical circumstance that quickly resolves or a change in circumstances that creates a conflict with *course* or program requirements should look in the course syllabus for options as described in 1.b and d. above.
- b. Missing several classes, tests, or deadlines over one or more courses or encountering repeated or prolonged episodes of disruption:
- If a medical circumstance is prolonged, the student has a compassionate ground for seeking an *academic concession* (see Policy clause 8.c), or a change in circumstances creates a long-term conflict with academic work, then the student should consult their home *academic advising office*, either directly or via a representative of another support unit, to discuss options.
- c. Sources of support other than academic advising offices:
- Depending on the student's circumstances, instead of first speaking to a representative in the home *academic advising office*, a student may wish to consult a different source of support (such as the Centre for Accessibility, the Sexual Violence Prevention and Response Office, Student Health Service, Counselling Services, the AMS' Sexual Assault Support Centre or an outside agency<sup>1</sup>) and then have a representative communicate with the *academic advising office* on their behalf.
- d. What students can expect from their home faculty or school:
- The *dean* or director (or designate such as an *academic advising office*) makes decisions on *academic concessions* based on the student's individual circumstances, including the grounds for *academic concession* and the student's understanding of the implications of alternative actions on the student's academic progress.
  - Information provided by a student or on behalf of a student by another support unit will be kept confidential.
  - In many instances, students will be asked to provide a self-declaration to describe their situation. However, if the *academic advising office* feels that the student's situation warrants input from or referral to one or more support units on or off campus, a decision on *academic concession* may require feedback from the other unit(s).
  - If a student seeks repeated *academic concessions* without evidence that proactive steps have been taken to address their issue(s), further *academic concessions* may not be granted.

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<sup>1</sup> The AMS' Sexual Assault Support Centre and any other outside agency are third-parties to the university with regard to the confidential sharing of information described in Policy Section 11.

**4. Managing Missed Term-end Submission Deadlines or Formal Examinations**

- a. In these cases, the student's home *academic advising office* must be involved in decisions on *academic concessions* (see Policy clause 9. b-f.).

DRAFT



03 May 2019

To: Vancouver Senate

From: Senate Academic Policy Committee

Re: Proposal to Establish the Centre for Innovative Data in Economics  
Research in the Vancouver School of Economics

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The Senate Academic Policy Committee has reviewed the attached proposal the Centre for Innovative Data in Economic Research (CIDER) in the Vancouver School of Economics in partnership with the Sauder School of Business. CIDER leverages the resources of the Canada Excellence Research Chair in the Vancouver School of Economics by bringing together researchers who are actively involved in generating, using, collecting, and analyzing innovative data for research in economics and related fields. In creating a permanent home for data-driven economic research, CIDER will overcome challenges accessing data, fostering collaboration on data initiatives across UBC units and with economists around the world, and also facilitate the training of students as the next generation of empirical economic researchers and social scientists. As data-driven research grows in importance throughout many disciplinary areas across the university, a unit such as CIDER will add to the University's ability to respond to these demands.

The Committee has reviewed the attached proposal and recommends the following:

**Motion:** *“That Senate approve and recommend to the Board the establishment of the Centre for Innovative Data in Economics Research in the School of Economics as set out in the attached proposal, effective July 1<sup>st</sup> 2019.”*

Respectfully submitted,

Dr. Paul Harrison, Chair

Senate Academic Policy Committee

*Proposal to the UBC Vancouver Senate for the Establishment of:*

**Centre for Innovative Data in Economics  
Research**

Date: April, 2019

Submitted by:

Dr. David Green, Director, Vancouver School of Economics  
Dr. Kevin Milligan, Professor, Vancouver School of Economics  
Dr. Erik Snowberg, Professor, Vancouver School of Economics

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## **EXECUTIVE SUMMARY**

Innovations in the use of data are transforming research in economics. We propose to harness, focus, and amplify the tremendous potential of data-driven economic research at the University of British Columbia through the establishment of the Centre for Innovative Data in Economic Research (CIDER). CIDER will leverage the resources of the Canada Excellence Research Chair in the Vancouver School of Economics in partnership with the Sauder School of Business by bringing together researchers who are actively involved in generating, using, collecting, and analyzing innovative data for research in economics and related fields. In creating a permanent home for data-driven economic research, CIDER will overcome challenges accessing data, fostering collaboration on data initiatives across UBC units and with economists around the world, and also facilitate the training of students as the next generation of empirical economic researchers and social scientists. CIDER will further UBC's strong position among Canadian economics departments and position UBC to take its place among the premier locations for economic research in the world.

## **I. OPPORTUNITY: Background and Transformation**

We propose to establish the Centre for Innovative Data in Economic Research (CIDER) in UBC's Vancouver School of Economics (VSE) and in partnership with the Sauder School of Business.

We begin the proposal with background on data-driven research and a discussion of how data-intensive research is transforming the landscape of economic research.

### **Background:**

Data innovation offers an unprecedented opportunity for expanding the use of evidence to test economic theories and improve policy making. In the last decade, data-driven innovations have changed economics research and the policy landscape, with data becoming the new currency for research, education, government, and commerce. The addition of a digital trade chapter in the recently concluded Canada-United States-Mexico Agreement further emphasizes the importance of data in the global economy. Improvements in the way evidence is drawn from data will have a direct impact on global economics development and the quality of life.

Making sense of the vast amounts of data collected about people and the world around them contributes to finding solutions to major social challenges, including improvements to health care, education, public safety, transportation, energy, and the environment. Similarly, the increase in innovative uses of data is causing a rapid evolution in economics and related fields, generating shifts across types of research conducted—and also the rise of entirely new methods and research questions. For example, data from administrative sources (such as tax filings, pension records, or health billings) is supplanting survey data in many fields of economic research and the use of randomized-controlled trials in field experiments has become widespread.<sup>1</sup> These innovations have been accompanied by advances in computational methods for analyzing data, such as language recognition and machine learning algorithms.

The Government of Canada and the University of British Columbia have recognized these trends through the establishment of the Canada Excellence Research Chair (CERC) in Data-Intensive Methods in Economics at the VSE, in partnership with the Sauder School of Business. Under the leadership of Dr. Erik Snowberg, Chairholder, the CERC has brought resources, capability, and focus to economic research using innovative data at UBC.

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<sup>1</sup> Administrative data refers to data originally collected for administrative purposes but that also has use for research purposes. For example, economic research at UBC has recently made use of administrative data such as de-identified tax records, pension records, health payment billings, and school test scores. The transformation toward administrative data in economics is best encapsulated by leading Harvard economist Raj Chetty in the New York Times in 2012: “We used to rely on surveys, but now we have administrative data sources from health care, schools, grocery scanners, etc., so we don’t have to rely just on what people tell us.” <https://www.nytimes.com/2012/10/07/opinion/sunday/catching-up-with-raj-chetty.html>. The rise of field experiments is documented in David Card, Stefano Dellavigna, and Ulrike Malmendier (2011), “The Role of Theory in Field Experiments,” *Journal of Economic Perspectives*, Vol. 25, no. 3, pp. 39-62.



## Transformation:

These developments in how data are generated and used for research are not unique to economics but do have a particular and unique impact on economic research. The new data landscape has transformed economic research in two fundamental ways, each of which provides motivation and justification for the establishment of CIDER.

1. Economists now work in larger teams in a collaborative environment, with increasing co-authorship and more research team members.
2. The way data are acquired and used requires new organizational structures.

We address each of these fundamental changes in turn.

### *Team research*

The first fundamental change is the evolution in team research in economics. This need for larger teams comes in part from the evolution of data in economics. In the past, empirical economic research might have used a research-ready survey of 10,000 respondents prepared and documented by an agency like Statistics Canada. Such data could be analyzed on the hard drive of one researcher with the help of a research assistant.

With the advent of new data sources and methods, datasets are now much larger, ever-evolving, more complex, and often come with security restrictions and confidentiality requirements. In addition, administrative data arrive in a ‘raw’ form, coming from various administrative sources (such as school records, health records, or pension records). Raw data requires much more effort to prepare and tailor for research purposes and to draw meaningful conclusions.

For these reasons, economic research is now more likely to feature several co-authors and require intensive work by full-time research assistants dedicated solely to the research project.<sup>2</sup> During the process, these research assistants acquire critical programming and data management skills that complement their coursework and prepare them for their dissertation research and other career avenues. In this way, the focus of current empirical economic research is moving closer to the style of a ‘laboratory’ as compared to the past.

The establishment of CIDER will facilitate and support this new style of research by providing an appropriate venue to organize collaboration, efficiently hire and manage larger teams of research assistants, and organize group access to hardware and software resources.

### *Organizational challenges*

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<sup>2</sup> See Katharina Rath and Klaus Wohlrabe (2016), “Recent trends in co-authorship in economics: evidence from RePEc,” *Applied Economics Letters*, Vol. 23, No. 12, pp. 897-202. DOI: 10.1080/13504851.2015.1119783.

The second fundamental change is the rise of new data-oriented organizational challenges that must be solved for research to proceed. Previously, empirical research required infrastructure such as a computer, access to data and a part-time student to work as a research assistant. The associated administration to produce research in that environment was straightforward.

Today, the rise of data-intensive research has brought new organizational challenges to be overcome. For example, some researchers require complex contract negotiation with both national and international non-governmental organizations (NGOs) to set up their project. In other cases, researchers need to comply with detailed data security arrangements in order to respect and satisfy confidentiality or intellectual property restrictions. The lack of experienced staff dedicated to these tasks puts economic researchers at UBC behind other institutions.

The establishment of CIDER will provide access to organizational expertise to solve these problems. When a new potential faculty hire is considering moving their data-based research to UBC, the availability of dedicated staff with experience in solving the associated legal, contractual, and computational challenges would be a great advantage and make UBC a more attractive economic research environment. The next section of this document directly addresses how CIDER will take on this evolving environment.

### **Summary:**

The large upswing in the use of data across society and particularly in economics provides a strong rationale for reorganizing economic research at UBC. The foundation of CIDER will confront these developments by leveraging existing resources at UBC to further strengthen the position of UBC as a global leader in innovative data-driven economic research, which will have broad benefits to the UBC community.

## **II. SOLUTION: Vision and Scope**

Our proposed solution to the challenges arising at the frontier of data-driven economic research is to establish CIDER at UBC. In this section, we elucidate our vision for CIDER and its scope.

### **Vision:**

CIDER will be the hub for data-driven economic research at UBC.

This focus on data-driven economic research most naturally lands on units like the VSE and the Sauder School of Business, but there are also clear benefits from interactions with other units around UBC working on similar questions, experiencing similar data access challenges, using similar analytic tools, or needing researchers trained in similar methods. By building a Centre focusing around a core field, CIDER will provide a base for future collaboration and development with other units around UBC.

The foundation of CIDER will directly address the two challenges confronting economic research identified in the previous section. First, CIDER will bring together the resources to facilitate the team-based research that is now needed for large-scale data-intensive economic research projects. Second, CIDER will house the expertise to administer and organize complex data-intensive research projects.

In practice, we envision CIDER to be:

A problem-solver for establishing complex data-intensive economics research projects. Whether it is setting up a complex data access agreement, arranging a partnership with an international NGO, or locating resources to train research assistants, CIDER will help overcome organizational constraints. CIDER staff will liaise around UBC and in the community to solve problems for researchers, pushing UBC to be the best environment to conduct economic research.

A collaborator on economic data projects and initiatives with other UBC units. Collaborative efforts on research projects currently exist between the VSE and various units around campus such as the Allard School of Law, the Pacific Institute for the Mathematical Sciences, and others. CIDER will facilitate and support these existing initiatives and explore ways to foster new collaboration.

A gateway to dissemination of economic research outside the academy. Communicating research outcomes through conferences, seminars, symposia, public outreach activities, and social media platforms. With the aid of a dedicated communications staffer, CIDER will maximize the impact of economics research at UBC and beyond.

An organizer of inter-university research initiatives. As Canada's top-ranked university for economics, UBC already plays a leadership role. In the past, the UBC economics department has organized large-scale inter-university collaborations like the SSHRC-funded 5-year TARGET project and the Canada Labour and Skills Research Network. CIDER will be a natural home to launch and administer future inter-university initiatives.

A trainer of the next generation of empirical economists. Top economics departments need well-trained and capable graduate students to realize the potential of large data-driven research projects. CIDER will ensure graduate students in economics have access to training opportunities and build experience with cutting edge research projects with innovative data.

A generator of new research funding. CIDER will provide assistance with grant writing and the administrative preparation of grant proposals. This provides a path to delivering on the goal of producing the best research, and also to the long-run sustainability of CIDER's operations

This suite of services, tailored to the needs of economics researchers and their collaborators across UBC, will further enhance the attractiveness of UBC as a premier site for economics research. Some of these services currently are available in different forms around UBC. However, bringing them together with permanent staff dedicated to

the particular needs of economics and related fields will provide maximum value.

The proposal for CIDER also aligns well with UBC's strategic priorities, as outlined in the 2018-2028 strategic plan "Shaping UBC's Next Century." In particular, CIDER will help UBC "lead globally in research excellence..." (Goal 1), "achieve agility in academic support and administration..." (Goal 9), and "lead as a model public institution, fostering discourse, knowledge exchange, and engagement..." (Goal 10).

Finally, we are fully committed to embed the principle of inclusion and intercultural fluency into the cultural framework of the Centre. Our vision for CIDER is for a Centre that will be attentive, pro-active, and demonstrate leadership on issues of diversity, human rights and representation. We will, in association with the Equity and Inclusion office, UBC, develop programs that focus on the development of skills and competencies for faculty, staff and students to enhance the capacity of Centre and to provide a learning environment that is intellectually rich and inclusive. We will create a robust and welcoming environment at the Centre that will actively engage diversity to enrich the work environment of the Centre in alignment with the UBC mission and vision regarding equity, diversity and inclusion.

### **Scope:**

The organizing vision of CIDER is to provide a hub for data-driven economics research at UBC. In reaching this vision, there are natural overlaps with other academic disciplines and CIDER will seek out and embrace those opportunities. Over the course of more than a dozen consultative meetings with scholars around campus, we learned of many potential areas for collaboration between economists and other units at UBC. From these meetings, we have collected statements of support from over twelve UBC scholars, including on-the-ground researchers and heads of academic units. Their letters can be seen in Appendix 1. These letters provide numerous examples of synergies between economics and other units, and express broad excitement and support for the CIDER initiative.

Within economics, CIDER will be active in economic research in a variety of fields, following the research interests of our UBC faculty members in economics. These topics include research projects in areas such as:

*Poverty and Susceptibility:* Advances in machine learning and cutting-edge technology and econometric methods will be used to analyze new data to develop evidence-based indicators to measure and improve quality of life. Also, research can investigate how digital technologies can help deliver financial services to the poor and in remote areas to improve quality of life

*Creation of Social Networks:* Individuals and their relationships define the society in which they live. New data and innovative methods will be used to observe relationships and their impact on social behaviour, and the subsequent impact on economic growth and development.

*Labour markets and Migration:* Migration has long played a central role in mobilizing the global economy and has influenced the current political and policy landscape. New data and measurement will provide new insight on the movement of populations, and

how such migration impacts the broader economy and current landscape.

*Technology:* Information and other technological advances are having huge impact on the structure of developing and developed economies and their resources. Randomized control trials and field-based data collection methods with new sources of data and measurement will be used to better understand the nature of these changes.

*Political Economy:* Recent years have seen an explosion of the types of data produced and stored by companies, governments, and private citizens. These data, and the tools to analyze it, are transforming the historically macro-level, theoretical field of political economy into a data-driven, micro-level research enterprise.

*Health Care:* Different health insurance and provision systems are used around the globe to improve health and quality of life. Often, the administrative data used in operating these systems produce useable research data that can help in assessing the productivity and economic incentives of different systems.

*Environmental Economics:* With growing social concerns about environmental and climate change, the study of the environment is an important part of modern economics. Economists address issues like air pollution, water quality, toxic substances, solid waste, and global warming. This research is increasingly data-intensive, and the results are used to assess currently policies and develop alternatives to deal with environmental challenges.

Examples of existing UBC Economics research activities are provided later in this document, in Section IV and Appendix 2.

## **Summary:**

Our vision is to establish CIDER as the hub for data-driven economics research at UBC. From this position, we expect CIDER to further UBC's leadership position in economics research both across Canada and globally.

## **III. OPERATIONS: Structure and Financing**

CIDER is organized around its core functions, with a structure that combines swift operations with accountability. We have also developed a financial plan that requires no additional requests of financial commitments from UBC. We explain the organizational and financial structures in this section.

### **Organizational Structure:**

The CIDER Steering Committee gives strategic direction, offers research oversight, and provides accountability. The Steering Committee will serve as the policy-making body of the Centre as well as providing effective governance. The Committee is responsible for setting and overseeing the implementation of CIDER policies and making sure that the management team is effectively establishing and maintaining good governance practices. The management team will be responsible to the CIDER Steering Committee,

and supported by operational and research staff. Below we fill out the roles in more detail.

#### *CIDER Steering Committee*

The CIDER Steering Committee will meet twice a year and have the following responsibilities.

1. Set strategic objectives and goals for CIDER.
2. Review the financial, operational, and research performance of the Centre.
3. Make appointment and compensation decisions for the Director and Scientific Director.
4. Prepare an annual report and communicate progress of the Centre to the general public, government officials, private partners and UBC governance.
5. Seek and bring perspectives on CIDER from the broader community.
6. Manage high-level work-place issues

The Steering Committee will consist of ex-officio members and at-large members.

1. Dean, Faculty of Arts (or delegate)- *Presumptive Chair of the Committee*
2. Director, VSE
3. Dean, Sauder School of Business (or delegate)
4. UBC Vice President Research and Innovation (or delegate)
5. CIDER Director
6. CIDER Scientific Director
7. At-large VSE faculty
8. At-large member of UBC community

The Dean of Arts is the presumptive Chair of the Steering Committee, but the Committee is free to choose any of its members to be Chair (excepting the Committee members who are also part of the management team).

One at-large faculty member from the department of Economics will be appointed by the VSE Director in consultation with the CIDER Director and Scientific Director.

One at-large UBC community member will be appointed by the UBC Vice President Research and Innovation in consultation with the CIDER Director and Scientific Director. This might be someone from another data-focused research unit on campus like the Data Sciences Institute or someone who adds to the diversity of views represented on the Steering Committee.

Membership of both at-large members of the steering committee will be for 2 years which can be renewed.

*CIDER Director*

The CIDER Director will lead the Centre, in co-operation with the Scientific Director. The core responsibilities are decisions about budgets, human resources, and implementing strategic priorities and policies. The Director is chosen by and responsible to the CIDER Steering Committee. Dr. Kevin Milligan has agreed to serve in this role.

*Scientific Director*

The Scientific Director works in co-operation with the Director, taking leadership for implementing the scientific agenda of CIDER. Dr. Erik Snowberg has agreed to take on this role.

The CIDER Director and Scientific Director will be part of both the steering committee and management team. They will ensure implementation of the strategic planning and research directions coming from the Steering Committee and will communicate decisions of the committee to research and staff members.

*CIDER Director of operations*

The CIDER Director will work in close collaboration with the Director of Operations (1.0 FTE) who will have the necessary skills and expertise in navigating through various UBC administrative processes and challenges, including contract negotiations, and will meet regularly to ensure the smooth flow of operations at the Centre. The Director of Operations will oversee the day-to-day activities of the Centre, manage and support CIDER staff and students, help liaise with other VSE/UBC staff including the UBC privacy office, UILO, and Legal Counsel to ensure compliance with confidentiality and legal issues surrounding the data.

The management team of the Centre, comprising the CIDER Director, Scientific Director and Director of Operations will ensure implementation of short-term and long-term CIDER objectives, governance practices developed by the steering committee and definition of the roles of employees within the Centre. They will also help in developing the employees through training, coaching, help in conflict resolution and communicating the vision of the Centre to its employees.

*Other Staff*

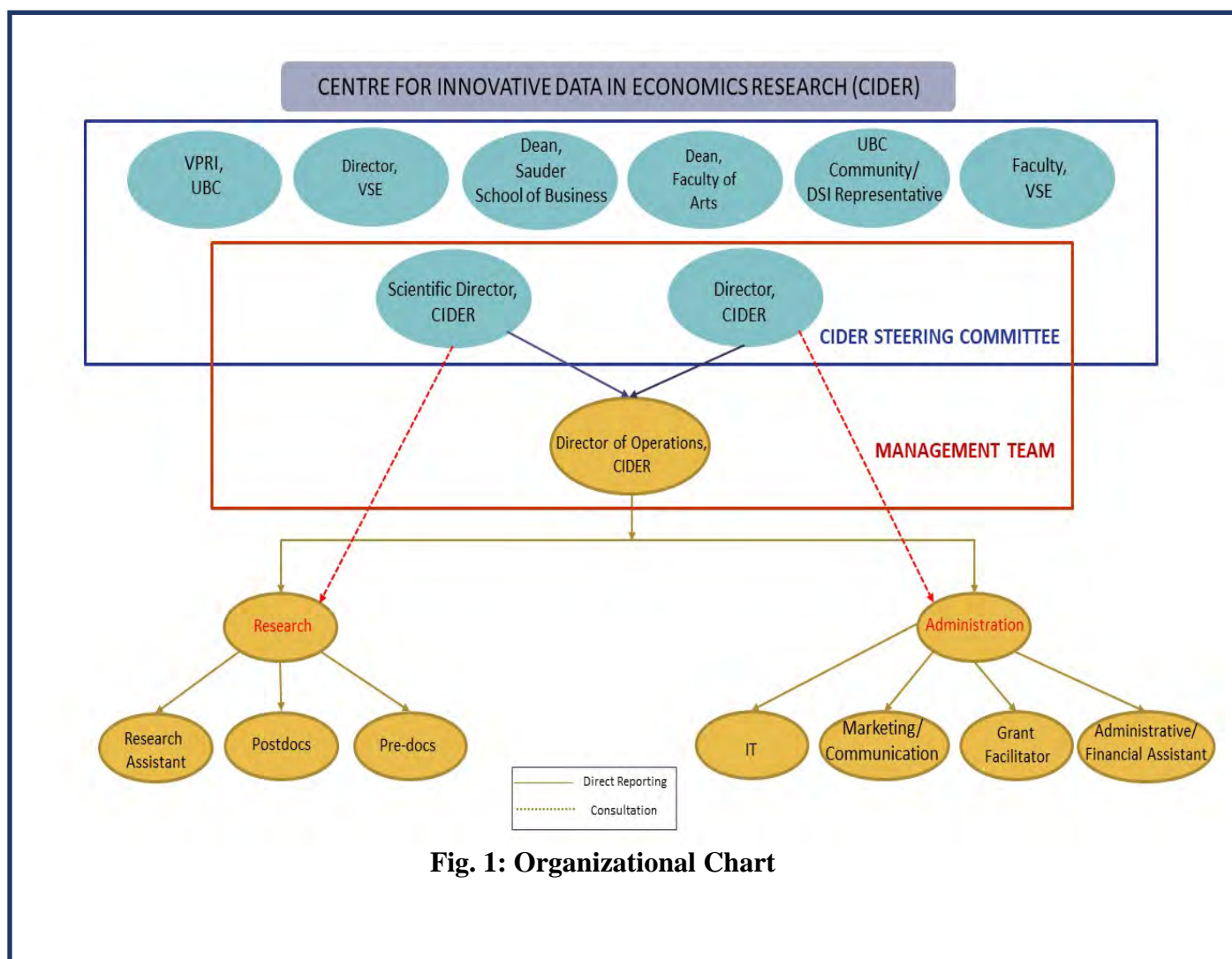
The administrative clerk (1.0 FTE) will process expenses, student appointments, the ordering of supplies, computer hardware and software, and other administrative support and financial tasks. The Data Manager (0.5FTE, shared with VSE), will oversee the operations of the secure data labs and provide data security support to the CIDER team members.

In addition, a communication and marketing specialist (0.5FTE) will be hired to promote research and co-ordinate the fund-raising activities of CIDER. This specialist will support the team in disseminating research results using a rich variety of channels, including web site, newsletter, and social media. The Communications and Marketing Manager will also assist in the planning and support of knowledge transfers events such as seminars, workshops and conferences. The appointment will be equally shared between CIDER and VSE.

A grants facilitator (1.0 FTE) will offer guidance and practical support for CIDER team members in identifying potential funding sources and the associated application processes. This will play an instrumental role in leveraging additional funds for the CIDER team members.

In addition, to carry out operational activities of the Centre such as recruitment, equipment, software purchase, seminars/meetings etc. we have kept aside \$100,000/year.

The organizational structure for CIDER is depicted in Figure 1.



### *CIDER Associates*

CIDER Associates will participate in furthering the research goals of CIDER and will have access to CIDER-provided services. CIDER Associates will be drawn from faculty across UBC departments or from other universities. CIDER Associates will be appointed



by the CIDER Steering Committee. The initial set of CIDER Associate nominees will be drawn from those who have already participated in projects related to CIDER or have expressed interest in doing so. We have listed these prospective CIDER Associates in Appendix 3.

### Financing:

Our plan for the finances of CIDER covers the first four years of operation, and also shows model results for the 2018-19 year which has just completed.

The operations of CIDER will initially be financed by two secured funding sources, the CERC and the Basic Income research program. The CERC has an overall budget of \$1.35M per year (for 7 years), The CERC financial plan has dedicated line items that will easily be moved into and organized through CIDER. In addition, CIDER will also be managing a \$2.3M Basic Income research initiative, which is funded by the BC government over a period of 2 years and is described in more detail in the next section.

Financially, the case for the establishment of CIDER makes sense for two reasons. First, as a formal Centre, CIDER will have standing to share in overhead costs from projects such as the Basic Income project and other research initiatives. Second, CIDER will provide a formal bridge to access resources between different research units. For example, research assistants working on economics projects can be funded across units more easily through CIDER.

Moreover, establishing CIDER will position UBC to compete for financial resources in the future from sources such as:

- Organization of funded, themed research programs from SSHRC and/or government partners.
- Overhead from external grants generated by CIDER researchers through the efforts of the Grant Facilitator.
- Fundraising from alumni and donors.

A summary of our prototype budget for five years of CIDER operation is below in Table 1.

STAFF/ACTIVITY	FY2019	FY2020	FY2021	FY2022	FY2023
<b>Administrative</b>					
Director of Operations(1.0FTE)	\$ 90,000	\$ 91,800	\$ 93,636	\$ 95,509	\$ 97,419
Administrative/Financial Assistant Clerk (1.0FTE)	\$ 50,155	\$ 51,158	\$ 52,181	\$ 53,225	\$ 54,289
Data Manager (0.5FTE)	\$ 40,000	\$ 40,800	\$ 41,616	\$ 42,448	\$ 43,297
Communication Specialist (0.5FTE)	\$ 40,000	\$ 40,800	\$ 41,616	\$ 42,448	\$ 43,297
<b>Research</b>					
Postdoctoral Fellow (1.0FTE)	\$ 75,000	\$ 76,500			
Research Assistant (1.0FTE)	\$ 50,000	\$ 51,000	\$ 50,000	\$ 51,000	\$ 50,000
Grant Facilitator (1.0FTE)		\$ 66,000	\$ 67,320	\$ 68,666	\$ 70,040
<b>Operations</b>	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
<b>Total</b>	\$ 445,155	\$ 518,058	\$ 446,639	\$ 453,296	\$ 458,342

**Table 1: Summary of budget outlook for the first five years of CIDER operation**

## **Summary:**

CIDER will have a straightforward organizational chart, providing clear lines of responsibility and accountability. The financial projection for a five-year horizon is solid.

## **IV. SUCCESS: Ongoing and Future**

CIDER will start by building on a strong record of ongoing success in economics at UBC. We will build on this base to achieve several key outcomes outlined below.

### **Ongoing Success:**

The Vancouver School of Economics is the top-ranked economics department in Canada, and the economics unit at the Sauder School of Business is—although much smaller than the VSE—independently in the top 10.<sup>3</sup> There is particular strength in political economy, development economics, labour economics, and international trade.

The Canada Excellence Research Chair was added to this strong economics research environment in 2016. The CERC was awarded to Dr. Erik Snowberg in Data-Intensive Methods in Economics. Dr. Snowberg is using innovative data to understand the effects of politics and policy on the economy. This chair was the first CERC awarded in the social sciences across Canada. This CERC award put UBC in a unique position to build upon existing opportunities to address and provide solutions to global economic problems. For example, Dr. Snowberg is using his expertise and experience to discover and promote effective solutions to poverty problems in Sub-Saharan African countries.

CIDER will also be home for other data-intensive research initiatives in economics. A current example is a research program on the design of income support programs (“Basic Income”) being funded by the BC government.<sup>4</sup> This project represents a transformative research study featuring top researchers from across Canada that will contribute both to research and to policy that is important for the province of British Columbia. CIDER will be the organizational home of this research program.

There are several other ongoing initiatives currently through the CERC initiative and the VSE that will be further advanced by CIDER.

*Grant Funding:* The CERC has funded an internal small grant program for innovative data in economics, modeled after the Hampton Fund Research Grants. Applications are invited from VSE and Sauder School of Business faculty members, and the proposals are adjudicated by a panel of peers. A competition is announced twice a year (winter and spring) and the grant amount varies between \$5,000-\$25,000. Duration of grants is for a year. The purpose of the funding is:

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<sup>3</sup> See REPEC rankings here: <https://ideas.repec.org/top/top.canada.html>

<sup>4</sup> This research program is housed in the Vancouver School of Economics and will be directed by Dr. David Green. See <https://news.gov.bc.ca/releases/2018SDPR0048-001317>.

- To encourage research, projects and initiatives that display use of *innovative data*. This could include but is not limited to, 'big data' (administrative data sets, etc.), experimental data (lab or RCT field experiment), or innovative use of survey data;
- to help and support pilot studies/ new research to generate data for large scale funding application;
- to facilitate development of new curriculum/course in the field of machine learning/innovative data.

We have already conducted three rounds of grant competition. In total, we received 61 applications out of which 47 grants application were approved for funding worth approximately \$800,000 (Appendix 2)

*Doctoral Fellowships:* The CERC funds CIDER Doctoral fellowships (\$184,000/annually) to provide financial support to graduate students at the VSE. This program allows UBC to continue to attract and support outstanding domestic and international doctoral students, and provide those students with stable, base-level funding for their doctoral studies and research. Around 20 students benefitted from this fellowship at present.

*Course development:* The CERC provided administrative and financial help to foster a partnership for open-source software and courses in quantitative and computational economics.<sup>5</sup> In partnership with the Pacific Institute of Mathematical Science (PIMS), the CERC helped to develop "Lectures in Quantitative Economics in Julia," a PhD course in computational economics with VSE's Prof. Jesse Perla as the co-author. The CERC also helped to create a new open-source textbook for quantitative economics and data science at the undergraduate level. This text is open-source and to be used for undergrad economics courses at UBC.

*Conferences and Workshops:* The CERC in association with University of California, Berkeley, organized conferences in political economy in 2016 and 2018 at the VSE. The scope of the conference includes theoretical and empirical research at the frontier of political economy and brings together an international group of economists and political scientists. The conferences provide an opportunity for researchers working in this area to exchange their opinions and ideas, and also helps in fostering new research collaborations. The conference was attended by over 60 scholars each year.

The CERC helped to organize and provided financial support to the Working Group in African Political Economy (WGAPE) in 2017 and 2018. WGAPE is an international forum for academic researchers and brings together faculty and advanced graduate students in Political Science and Economics who combine deep field research experience in Africa with training in political economy methods.

*Creation of data and server room:* The CERC provided support to renovate and set up a new secure data room at the VSE to access German administrative data. The establishment of the secured data room provided VSE researchers with unique opportunities to access detailed data for research purposes which was previously not

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<sup>5</sup> <https://economics.ubc.ca/news/2018/new-partnership-enhances-study-of-computational-economics-at-ubc>

possible because of confidentiality issues. We are also currently working towards setting up a secure server for a collaborative project between economic history researchers at the VSE and the University of Toronto. This places CIDER in an ideal position to initiate and lead team-based, large projects at both the national and international levels.

*Training Opportunities to students:* Through our initiative we are providing unique training and employment opportunities to students as part of their academic learning process. These students are recent graduates from undergraduate or master's degrees in a field related to economics who aims to build research skills in data-intensive economic research methods before beginning doctoral studies or pursuing alternative career paths.

### **Future Success:**

We expect CIDER will succeed in the vision we set out: to be the hub for data-driven economic research at UBC. This success will lead to several benefits for UBC.

#### *Produce outstanding and impactful data-driven economic research*

The research that results from the establishment of CIDER will push forward economic knowledge and improves global economic outcomes. Projects initiated through the small grants program will blossom into published research papers, and new large-scale research programs like the Basic Income project will yield substantial scholarly insight and have tangible real-world impact on public policy.

#### *Attract and retain top economic researchers at UBC*

Hiring and retention in economics is a constant challenge. To maintain UBC's standing and keep pushing toward the top global tier, UBC needs to offer a competitive research environment for producing data-intensive economic research. CIDER will be a key part of the offer to hire and retain top economics faculty.

#### *Train the next generation of empirical economic researchers*

CIDER provides UBC economics students with the opportunity to be taught by and work on research projects with world-leading data-intensive economic researchers. In addition, CIDER's development of new course materials on data-intensive research methods has a clear and direct benefit for UBC's students.

#### *Co-ordination and synergy with other data-intensive research units*

As the hub for data-intensive research in economics, CIDER will be central to coordinating research projects and training opportunities with units outside economics. This will provide real spillover benefits to other units around UBC working in related areas.

**Summary:**

We firmly believe that the establishment of CIDER will leverage existing resources to express the potential of the CERC. We look forward to building on the existing record of success to implement this plan for CIDER. The new CIDER will launch economics at UBC to the forefront of data-intensive economic research in the world.

## **Appendix 1:**

### **List of Supporting Departments**

The following units have indicated support for CIDER, foreseeing fruitful collaborations in the future.

Department of Sociology  
Department of Political Science  
Peter A. Allard School of Law  
Pacific Institute of Mathematical Sciences  
Department of Computer Science  
Data Science Institute  
iSchool (Library, Archival and Information Studies)  
The Vice-President, Research & Innovation Office  
School of Population and Public Health  
PopData BC  
Vancouver School of Economics  
Sauder School of Business  
Faculty of Arts

## Appendix 2:

### List of current data-intensive projects funded by CERC

#### Health Care

**Dr. Josh Gottlieb, Associate Professor, VSE, UBC**

**1. Project Title:** The Health Consequences of Coal-Fired Power Plants: Evidence from the Fracking Revolution

**Project Summary:** We propose to specifically investigate the consequences of the shift from coal to natural gas, due to the fracking revolution, for the health of Medicare beneficiaries. In the first step of our analysis, we will use innovative machine learning techniques to measure how that shift affects air quality. These techniques will allow us to determine exactly which geographic regions' air quality depends on each power plant's operation; and thus, how much fracking affects air quality in each county. Second, we will measure the effects of changing air pollution on illness, hospitalization, and mortality among the Medicare population.

*Amount:* \$ 23,000

**2. Project Title:** What Does Health Insurance Insure? Evidence from Big Data on Insurer Coverage Decisions

**Project Summary:** Health care is a complicated business, which makes health insurance a complex part of insurance. Health insurers have to decide what drugs and procedures to cover, which not to cover, and which ones to cover but subject to stringent conditions or pre-authorization requirements. Despite the importance of this problem, little-to-no existing research studies these coverage decisions. We will use innovative methods with big data to understand coverage decisions. We will start by measuring insurers' coverage decisions, and then we will study their determinants and impacts. Although the project is about US insurers, Canadian provincial plans face these same challenges.

*Amount:* \$ 20,000

**Dr. Daniel (Yichuan) Ding, Assistant Professor, Sauder School of Business, UBC**

**Project Title:** Innovative Use of Data for Better Gatekeeping in Emergency Department

**Project Summary:** Whether an emergency department (ED) visitor should be admitted to inpatient units or discharged home? Such gatekeeping decisions have been made by ED doctors every day. The general expectation is that these decisions should solely depend on the patient's clinical conditions. Nevertheless, by analyzing data from over 200,000 patient visits to the four major EDs in Great Vancouver, we find that some non-clinical factors have also affected the doctors' decisions, such as congestion level and financial incentives. As a separate project, we use machine learning to develop a score that predicts the wrongful discharge rate for each patient. That score will be used as a reference for doctors to make their disposition decision.

*Amount:* \$10,000

#### Political Economy

**Dr. Thorsten Rogall, Assistant Professor, VSE, UBC**

**Project Title:** Controlling the Electorate in an Autocracy

**Project Summary:** Every last Saturday of the month villagers in Rwanda get together to work on public projects(Umuganda).

We find that villages in which many of these last Saturdays were rainy (and attendance to the meetings, exclusively outdoor, presumably lower), vote shares for the ruling party are lower. 1) Why is this the case? 2) Is there really a relationship between rainfall and Umuganda attendance in the first place? We will design and run a survey in Rwanda to answer these questions. As many questions are going to be highly sensitive, we have to use innovative methods to elicit the truth.

*Amount: \$ 28,500*

**Dr. Munir Squires, Assistant Professor, VSE, UBC**

**1. Project Title:** Worker effort and kinship taxation: Experimental evidence from the DRC

**Project Summary:** The ability of firms to incentivize effort may be limited if their workers are 'taxed' by their kin. Evidence from field experiments suggests that unlike in developed countries, workers in developing countries are unresponsive to incentive pay (Bandiera and Fischer 2013; Ashraf, Bandiera and Jack 2014). To what extent is this unresponsiveness to incentive pay driven by sharing obligations? In answering this question, this project will provide the first direct measure in a natural setting of the costs of this type of distortion, 'kinship taxation'.

*Amount: \$30,000*

**2. Project Title:** Cousin marriage in the U.S., 1850-1930

**Project Summary:** This project aims to be the most serious economic study to date of cousin marriage. Aside from the obvious genetic implications, tightly knit clan structures sustained by cousin marriage may impede integration, societal trust, and political participation. We propose to use US census data from the 19th and early 20th century to answer a series of questions related to cousin marriage. Since these censuses do not directly ask about cousin marriage, we will infer the genetic relationship between spouses from the data. This will require linking multiple rounds, following individuals before and after marriage and across generations.

*Amount: \$ 20,000*

**3. Project Title:** Spending effectiveness and sources of revenue: Evidence from DRC savings groups

**Project Summary:** Why do poor countries have weak and ineffectual states? Part of this may be driven by the small share of revenue raised by direct taxation, which may reduce incentives for effective fiscal management. That is, corruption and mismanagement may partly derive from the large share of revenue that comes from windfalls, such as natural resource rents, intra-government transfers and foreign aid (Reinikka and Svensson, 2004). Similar mechanisms may also be at play in non-state organizations: Do nonprofits function more effectively if their revenue comes from member donations rather than large outside grants?

*Amount: \$29,648*

## **Labour, Markets and Migration**

**Prof. David Green, Professor, VSE, UBC**

**Project Title:** Job Creation Impacts of Immigration

**Project Summary:** A common finding on the impact of immigration on an economy is that employment rates fall following an immigration shock but recover to their former levels within 3 to 5 years. This implies that an increase in population from immigration is followed by a similar proportion increase in job creation. In this project, we study the channels through which that job creation occurs, using this as a basis for understanding more about job creation in general. We use a linkage of administrative data for the landing records for all immigrants who arrive in Canada after 2000 with their personal tax data and firm tax data. We also use the same tax data for non-immigrants. The data needs to be worked on inside Statistics Canada.

*Amount: \$ 21,500*

**Dr. Florian Hoffman, Assistant Professor, VSE, UBC**

**Project Title:** Economic Development and Labour Market Dynamics in the British Empire

**Project Summary:** In this project we study the dynamic decision making and allocation process of colonial administrators in the British Empire and investigate the relationship between institutional rules and strategic career concerns with the colonies' past and present performances. To this end we have digitized the internal personnel data of the British Empire for the years 1863 to 1966, including all former colonies but India. Individual bureaucrats are followed over time and across colonies. We match to these data a rich set of historical colony-year socioeconomic- and political outcomes. Funding is required for the expensive cleaning and organization of our digitized data



*Amount: \$ 32,000*

**Dr. Kevin Milligan, Professor, VSE, UBC**

**Project Title:** Investment behavior and heterogeneous financial policy: evidence from Canada

**Project Summary:** We test the neoclassical theory of corporate taxation and investment behaviour for Canada. Of particular interest is whether or not investment responses to taxation are heterogeneous across firms. We use the dividend tax reform in 2006 as a source identifying variation. The reform increased the integration rate of large corporate firms, equivalent to a reduction in the dividend tax. As a control group we use small incorporated business. This research design allows us to test for differences in the long run investment decisions of small and large firms.

*Amount: \$11,600*

**Dr. Kai Li, Professor, Sauder School of Business, UBC**

**Project Title:** New Product Development and Mergers and Acquisitions: Insights from the USPTO Trademark Data

**Project Summary:** One important question in the Mergers & Acquisitions (M&As) literature is why do firms merge? Prior research has suggested two sources of synergistic gains. First, mergers may generate productive efficiencies. Second, potentially anticompetitive mergers among firms with similar products could enable the combined firm to exercise market power. The proposed research is one of the first to employ novel trademark data that only became available from the U.S. Patent and Trademark Office in recent years to shed light on the sources of synergistic gains in M&As and their differential effects on new product development of acquirers and target firms.

*Amount: \$15,000*

**Dr. Yi Qian, Associate Professor, Sauder School of Business, UBC**

**Project Title:** Blockchain and Intellectual Property

**Project Summary:** Intellectual property has become one of the fundamental drivers of overall success of a firm. Because IPs serve as a platform for new product development and signal new product development to financial markets, firms make substantial investments each year to generate and maintain their IP portfolios in order to deliver long-term shareholder value and sustainable competitive advantage. We propose to study the impact of blockchain technology on incentives to innovate and engage in entrepreneurial activities. We propose to generate innovative data by combining field data and experiments in order to test the impacts of blockchain on stimulating incentives to innovate.

*Amount: \$12,000*

**Dr. Vanessa Alvarez, Assistant Professor, Sauder School of Business, UBC**

**1. Project Title:** Multinationals and the Welfare Consequences of Market Concentration

**Project Summary:** In recent years' evidence has been accumulating that market power is on the rise. This has been highlighted in reports by the (former) Council of Economic Advisers, articles in The Economist, and even a colloquium on the topic at the University of Chicago last spring. Barkai (2016) has documented that observed declines in the share of labour coincide with rising shares of profits. Autor et al (2017) find rises in concentration in many industries, attributing this increase to the rise of superstar firms. In another recent working paper, De Loecker and Eeckhout (2017) find that markups have been rising over time. Our research proposal intends to bring a new set of evidence to the issue of rising market power, viewed through the lens of a tractable oligopoly model that has recently been usefully applied in other contexts. To quantitatively assess this phenomenon, we will use of a novel detailed brand level dataset together with a comprehensive database of firms' global corporate structure.

*Amount: \$13,000*

**2. Project Title:** Cross-Border Intra-Firm Trade and the Propagation of Idiosyncratic Shocks

**Project Summary:** The goal of this project is to study how ownership linkages in international production networks affect the transmission of trade shocks. The importance of this question was highlighted during the recent turbulent renegotiation of NAFTA, when many multinationals vehemently opposed changes that would disrupt their established networks. We will quantify the importance of such disruptions by combining data on exogenous natural disasters around the globe and detailed information on activities of multinationals in the US. We are particularly interested in examining whether the effect of trade shocks

depends on whether trade happens within the firm or between unrelated parties.

*Amount:* \$14,000

**Dr. Gene Lee, Assistant Professor, Sauder School of Business, UBC**

**Project Title:** Online Labour Market Efficiency and Algorithmic Recommendations

**Project Summary:** Do algorithmic recommendations improve online labour market efficiency? While a few papers have run field experiments to answer this question, the authors limited the sample size to less than 10 percent of the market participants to avoid interactions between observations. By combining field experiments and structural estimation, we plan to estimate the changes in market efficiency when algorithmic recommendations are offered to all market participants. We also plan to measure the effect of recommendations on the well-documented human biases and find whether they are corrected or amplified by the algorithms in the long run.

*Amount:* \$19,200

**Dr. Viktoriya Hnatkovska, Associate Professor, VSE**

**Project Title:** Prices in Emerging Market Economies: Theory and Evidence from India

**Project Summary:** We propose to build a micro level price database for a large emerging economy, India. This involves accessing the administrative data behind the CPI and linking it to published prices at different stages (farm gate, wholesale and retail). This would be supplemented by scraped online prices for the same items. The database would be novel in its coverage of frequency, sectors, geography and spectrum of supply chain which would help in addressing a number of questions related to price setting, monetary policy, inequality and responses to shocks in an emerging economy.

*Amount:* \$22,900

**Dr. Ken Kikkawa**

**Project Title:** On the boundary of the firm: Firm-to-firm production network data combined with employer-employee data

**Project Summary:** In this project we merge two detailed datasets in Belgium: A dataset from the VAT-system that records the universe of domestic firm-to-firm transactions, and a matched employer-employee dataset from the social security registry. The merged datasets enable us to explore in a unique way how shocks affect not only firms but also individual workers through the production network. We plan to analyze the boundary of the firm and provide a view of production that is integrated over all suppliers of the firm and over all workers of the suppliers.

*Amount:* \$15,000

## **Technology**

**Dr. Sam Hwang, Assistant Professor, VSE, UBC**

**Project Title:** Testing the No Safety School Theorem Using Field Data

**Project Summary:** We will test whether high school students' choice of college application portfolios is consistent with predictions of economic theory by Chade and Smith (2006 *Econometrica*), or what is known as No Safety School Theorem. We will use an administrative data set from Ontario Universities' application Centre, a non-profit organization that processes online applications for admission to universities in Ontario. We have access to their administrative data set, which includes detailed records of millions of students for the past twenty admission cycles, including their high school grades, university applications, offers, and enrollment decisions – all matched with census data.

*Amount:* \$ 23,000

**Dr. Marit Rehavi, Associate Professor, VSE, UBC**

**Project Title:** Longitudinal data in Academic careers

**Project Summary:** This is a collaboration between two research teams (Hiro and Sam; and Marit, Nicole and Thomas) to create data we both need for our respective projects. We will turn the CV data from EconJobMarket (EJM) and from PhD economists' subsequent CVs into a longitudinal data set of the careers of every economist who's received a PhD in North America since 2009. These data will be paired with job application data from EJM to create a complete data set of initial conditions at the time of the job

market and early career outcomes. We will use these data to study matching and to test for gender disparities.

*Amount:* \$19,085

**Dr. Michael Devereux, Professor, VSE, UBC**

**Project Title:** The effects of exchange rates on cross-border economic activity

**Project Summary:** My proposal is to utilize a database of retail prices and quantities for the US economy to explore the impact of exchange rate fluctuations within very narrow geographical areas close to the US border with Canada and Mexico, using a structural model of firm entry, product choice, pricing and sales. The methodology allows for a precise measure of the impact of exchange rates within a narrow geographical area, and to infer the importance of trade costs at the local level.

*Amount:* \$ 17,000

**Dr. Siwan Anderson, Professor, VSE, UBC**

**Project Title:** Training MLAs to Better Serve

**Project Summary:** India, a developing country with a strong and vibrant democracy, exhibits many elements of weak institutions and associated problems of ineffective governance. Both state and national legislatures are characterized by high levels of corruption, criminality and poor performance. At the same time, a number of representatives are well-known for delivering to their constituents through services and representation. In this project, we focus on members of legislative assemblies (henceforth MLAs) – elected to the state parliament (the Vidhan Sabha) via universal adult franchise. Some of these MLAs are high performing, the others are less effective.

*Amount:* \$ 26,000

**Project Title:** Local Council Elections in Uganda

**Project Summary:** For the first time since 2002, local-level democratic elections are going to be held this summer in rural Uganda. We have secured funding to conduct a large-scale field survey across a randomly selected sample of villages before and after this election. One unique component of this election is the voting procedure. The elections are going to take place by lining up behind the candidate of choice. We would like to apply for funds through CIDE Small Grants to conduct an observational study of this unique election process.

*Amount:* \$ 20,000

**Dr. Mauricio Drelichman, Associate Professor, VSE, UBC**

**Project Title:** Since when did Education Matter: a study of 19th Century English Education”

**Project Summary:** This project will study the effects of education on intergenerational mobility, using British census and parish school data from the late 19th and early 20th centuries. I will use probabilistic matching, big data methods, and recently developed optical character recognition software to link census records and parish education data across different generations. The funds requested will enable the hiring of a research assistant, the purchase of CPU time from a high performance computing service, and travel to the UK National Archives to gather data.

*Amount:* \$ 8,500

**Dr. Paul Schrimpf, Associate Professor, VSE, UBC**

**Project Title:** Investment and Uncertainty with Time to Build: An Application to US Natural Gas Pipelines

**Project Summary:** We will assess the consequences of uncertainty for investment in a regulated industry in which it takes time to build. To do this we need data on initiation and completion of permitting and construction phases, as well as the terms of the contracts that are written between gas companies and marketers, regulated prices, and the prices and shipments that result from subsequent market games. This will be a very large and unique data set that will allow us to investigate the effects of regulation on investment. In particular, we will look at shortening the permitting process and using other forms of price regulation.

*Amount:* \$ 17,000

**Dr. Tomasz Swiecki, Assistant Professor, VSE, UBC****Project Title:** Unpacking costs of switching sectors

**Project Summary:** Black-box costs of switching sectors denoted in utility terms are frequently used to rationalize observed differences in residual wages across sectors. For example, in our recent work we find that switching costs equivalent to 20% of annual income are required to explain the pattern of sectoral choices in Indonesia. Our goal in this project is to gain a deeper understanding of what these switching costs really capture. We plan to apply machine learning techniques to detailed household survey data to find patterns associated with restricted worker mobility. These results will inform follow-up research developing a model with endogenous switching costs.

*Amount:* \$ 8,000**Dr. Jesse Perla, Assistant Professor, VSE, UBC****Project Title:** Orbis Data

**Project Summary:** This is a medium-sized application to purchase a worldwide panel of 200 million small, mostly private firms across the world. The data would be used by several (already identified) research projects from faculty, as well as for projects in a number of classes. The hope is that macro and trade PhD students would be motivated to continue using the data for thesis work.

*Amount:* \$ 40,000**Project Title: Data Science and Scientific Computing Infrastructure for Classes and Research**

**Project Summary:** This project provides a buffer of technical support and technical consulting services to: (1) help build and host a data-science course intended to have its own course-code in the new “technical” stream bachelors; (2) provide computational infrastructure for the ECON628 PhD class; and (3) provide computational infrastructure for Julia/Python/R to “democratize” access to the Compute Canada cluster. This would be done in conjunction with the Pacific Institute of Mathematical Sciences (PIMS) who would provide cluster access for classes/research, and Julia Computing for the cluster implementation of Julia. This could generate a joint PIMS/CIDE/Julia Computing press-release.

*Amount:* \$ 17,000**Dr. Henry Siu, Professor, VSE, UBC****Project Title:** Census Linkage and longitudinal data:1900-1940

**Project Summary:** We will test whether high school students’ choice of college application portfolios is consistent with predictions of economic theory by Chade and Smith (2006 Econometrica), or what is known as No Safety School Theorem. We will use an administrative data set from Ontario Universities’ application Centre, a non-profit organization that processes online applications for admission to universities in Ontario. We have access to their administrative data set, which includes detailed records of millions of students for the past twenty admission cycles, including their high school grades, university applications, offers, and enrollment decisions – all matched with census data.

*Amount:* \$ 10,850**Dr. Felipe Valencia, Assistant Professor, VSE, UBC****1. Project Title:** Engineering Growth: Innovative Capacity and Development in the Americas

**Project Summary:** This project aims to offer the first systematic historical evidence on the role of a central actor in modern growth theory—the engineer. It collects cross-country and state-level data on the labour share of engineers for the Americas, and county-level data on engineering and patenting for the U.S. during the Second Industrial Revolution. These are robustly correlated with income today after controlling for literacy, other types of higher order human capital (lawyers, physicians), and demand side factors, as well as after instrumenting engineering using the Land Grant Colleges program. We further show that engineers supported technological adoption and structural transformation.

*Amount:* \$11,500**2. Project Title:** Trust Unraveled: The Long Shadow of the Spanish Civil War

**Project Summary:** In this project we aim to show that the Spanish Civil War had a significant long-lasting effect on social capital, using geo-located data on historical mass graves and disaggregated modern-day

survey data on trust. Preliminary results evince a significant negative relationship between exhumed mass graves and this same trust variable, pointing towards the deleterious long-term effects of political violence against civilians. To deal with the potential endogeneity of conflict, we use military plans of attack in conjunction with the historical highway network. We further decompose trust, finding negative effects of conflict on trust on institutions associated with the Civil War.

*Amount:* \$13,000

**Dr. Margaret Slade, Professor Emeritus, VSE, UBC**

**Project Title:** Empirical Studies of Regulated Energy Markets

**Project Summary:** We would like to acquire a large data set that contains detailed information about US and Canadian natural gas and electricity markets. Marmer, Schrimpf, and Slade will use the data on natural gas pipeline rates and capacity releases to complement their previously funded study on investment and regulatory delays. They will also undertake new research on contracting in natural gas markets. Antweiler plans to assess local marginal pricing in electricity markets, and Baylis will investigate the historical determinants of peak electricity demand. The data will be available to all UBC economists.

*Amount:* \$15,650

**Dr. Dale Griffin, Professor, Sauder School of Business, UBC**

**Project Title:** Developing a public archive of choice data to support modeling of individual differences in investment risk tolerance

**Project Summary:** We propose to work with the Ontario Securities Commission (OSC) to measure the risk attitudes of a sample of investors who are working with financial investors to develop a retirement investment plan. In particular, we will measure individual differences in the investors' risk attitudes using a 4-parameter Prospect Theory approach that adds Loss Aversion, Probability Weighting curvature, and Probability Weighting elevation as additional parameters beyond the standard curvature of the utility function. Our outcomes will include both existing risk attitude measures and investors' level of satisfaction with their investment choices. We will post our data to provide extra value.

*Amount:* \$21,000

**Dr. Will Gornall, Professor, Sauder School of Business, UB**

**Project Title:** Gender, Race, and Entrepreneurship: A Randomized Field Experiment on Venture Capitalists and Angels

**Project Summary:** We study gender and race in high-impact entrepreneurship within a tightly controlled random field experiment. We send out pitch emails that introduce promising start-ups to 28,000 business angels and venture capitalists. Each e-mail is sent by a fictitious entrepreneur with randomly selected gender (male or female) and race (Asian or White). By comparing the reply rates of different genders and races, we can estimate gender and racial discrimination.

*Amount:* \$7,180

## **Environmental Economy**

**Dr. Patrick Baylis, Assistant Professor, VSE, UBC**

**Project Title:** Natural language processing for economic research: Defending against air pollution in Delhi

**Project Summary:** This project will investigate defensive behavior in response to new information about pollution threats in Delhi, India. By combining natural language processing (NLP) of geo-located statements on social media with data from recently deployed pollution monitors, we will estimate the extent to which localized information on environmental threats is incorporated into households' daily activity choices. Additionally, this project will be the first in a series that will develop NLP capacity to conduct economic research at the VSE. Social media, public comment platforms, and congressional records are all examples of text-based sources of data on public opinion, but NLP analyses to use them require large fixed costs. The goal is to produce a public good by establishing both a computational platform and a pipeline for NLP analyses that can be reused for future projects by members of the VSE community.

*Amount:* \$ 18,000

**Dr. Markus Baldauf, Assistant Professor, Sauder School of Business, UBC**

**Project Title:** Does Climate change affect real estate process? Only if you believe it.

**Project Summary:** Scientists agree that climate change will have a significant impact on U.S. coastal regions, yet beliefs among the general population on its occurrence and effects are divided. This project aims to use new data in order to test empirically whether real estate valuations reflect these differences in beliefs. We use data on local projections of expected sea level rise and beliefs of the U.S. population on climate change to investigate this link. Preliminary evidence suggests that in areas with more climate change deniers, home prices are less responsive to expected future sea level rise, compared to areas with fewer deniers.

*Amount:* \$14,000

**Poverty and Susceptibility****Dr. Giovanni Gallipoli, Associate Professor, VSE, UBC**

**1. Project Title:** The Evolution of Wealth Inequality in Canada between 1982 and 2014: A New Perspective Based on Newly Combined Data on Assets and Liabilities.

**Project Summary:** The objective of this project is to characterize both the level and evolution of wealth (net worth) inequality in Canada between 1982 and 2014. The analysis will rely on newly combined sources of both asset holdings and liabilities. These sources include information from surveys, administrative records and private sector data. The proposed study will allow to examine which components of households' net worth have experienced stronger shifts over the past three decades. The analysis will also document any differences in the evolution of net worth for households in different groups defined along the lines of gender, age, family structure, region of residence, income, and portfolio composition.

*Amount:* \$10,500

**2. Project Title:** Nutrition over the Business Cycle: the Effects of Recessions on the Distribution of Nutritional Intake

**Project Summary:** The objective of this project is to quantify the effects of income fluctuations on the nutritional content of food consumed at home in a large panel of households. Our analysis will rely on three datasets: (i) Nielsen Homescan Panel, with detailed information about food purchased by US households (already clean and organized on my server); (ii) Gladson data and (iii) USDA "National Nutrient Database for Standard Reference", which convey information about nutritional content of food products. We will describe demographic and geographic variation in the quality of food intake, and develop a simple model of households' shopping over the business cycle.

*Amount:* \$18,000

**Dr. Patrick Francois, Professor, VSE, UBC**

**1. Project Title:** How Trust, Beliefs and Information Help Institution Work: Field Experiments in ROSCAs in Congo

**Project Summary:** Despite their importance for development, little is understood about what makes institutions function better in some settings than in others. This study asks whether pro-social values (such as trust and altruism) and information about them, help the functioning of an economic institution. We will create rotating savings groups (roscas), a widespread form of saving institution across the developing world. These are subject to participant malfeasance. We will pretest subjects (using incentivized methods) on their degrees of trust/prosociality and vary roscas composition based on subjects' trust and prosociality levels: broadly high and low. We will further vary information subjects received about their group's composition. Outcome differences will inform us of the importance of differing components.

*Amount:* \$19,520

**2. Project Title:** Cultural Group Selection V. Acquired Characteristics in the Laboratory

**Project Summary:** The project aims to test the predictions of the two most prominent and competing theories of human prosociality in a laboratory setting. The theories both predict that group level competition will generate prosociality. One theory, Cultural Group Selection (CGS), argues competition across groups yields prosociality via selection. Another, Acquired Characteristics (AC), argues competition

cues prosociality. We have designed an experiment to distinguish between them. We seek funding to run it using the UBC/Econ lab and subject pool.

*Amount: \$20,000*

**Dr. Rajesh Vijayraghavan, Assistant Professor, Sauder School of Business, UBC**

**1. Project Title:** How do Bank Bailout Affect Firm Decisions? Evidence from Danish Banks and their Customers

**Project Summary:** In this research, we exploit detailed bank and firm level data building on administrative data sets in a Danish setting. The data is novel and allows us to study the relationship between banks and the firms that they lend to, particularly when the banks faced a credit crunch during the financial crisis. Our aim is to understand by using the micro-data in the determinants of Danish banks that applied for a bail out, and the firm responses to their banks receiving the bail out from the government.

*Amount: \$10,410*

**2. Project Title:** Understanding the Relationship between Credit Ratings of Firms and the Credit Risk of their Banks

**Project Summary:** In this proposal, we aim to find the relationship between credit risk information disclosed in the financial statements of banks, and credit ratings of the firms that they have a lending relationship. We use a novel dataset of Danish banks and firms, that allow us to identify this relationship. The innovation comes from comparing the disclosed credit risk of banks as disclosed in their financial statements and by regulators on one hand, and the implicit credit risk from each bank's individual loan portfolio on the other. This proposal builds on an ongoing project in the Danish setting.

*Amount: \$10,720*

**Dr. Alexander Bleck, Assistant Professor, Sauder School of Business, UBC**

**Project Title:** The Real Effects of Accounting Measurement

**Project Summary:** In this proposal, we seek to make use of innovative regulatory data to test a theory of bank regulation. Our goal is to use the first study to motivate an application for additional funding through a SSHRC grant in 2018. The theory provides an explanation for the contribution of accounting standards in the banking sector to the financial crisis. The theory suggests a reverse causality between the use of market prices (mark-to-market accounting) in valuing activity inside the bank and the activity of the bank.

*Amount: \$11,250*

## **Creation of Social Networks**

**Dr. Wei Li, Associate Professor, VSE, UBC**

**Project Title:** Learning in Local Networks: An experimental study

**Project Summary:** Agents in a network want to learn about the true state of the world from their own signals and their neighbors' reports. We develop and test a tractable model in which agents only know their local networks-their neighbors and the links among them-and have finite levels of cognitive ability. We show that agents can still learn correctly when the network is a social quilt, a tree-like union of fully connected subnetworks. But they make two types of learning errors, repetition and oscillation, in other networks. We test these predictions in the lab, focusing on how the type and severity of learning errors depend on the network and the information environment the agents are in.

*Amount: \$9,500*

**Dr. Francesco Trebbi, Associate Professor, VSE, UBC**

**Project Title:** Nepotism and State Capacity Building Family Networks and the persistence of Bureaucrats in the Public Service

**Project Summary:** We will test whether high school students' choice of college application portfolios is consistent with predictions of economic theory by Chade and Smith (2006 Econometrica), or what is known as No Safety School Theorem. We will use an administrative data set from Ontario Universities' application Centre, a non-profit organization that processes online applications for admission to universities in Ontario. We have access to their administrative data set, which includes detailed records of millions of students for the past twenty admission cycles, including their high school grades, university applications, offers, and enrollment decisions – all matched with census data.

*Amount:* \$ 15,595

**Dr. David Clough, Assistant Professor, Sauder School of Business, UBC**

**Project Title:** Platform Competition: Mobilizing Complementors by Creating Social Foci

**Project Summary:** Digital platforms compete to attract the efforts of developers who create software that adds value to the core platforms. In a longitudinal study of the codebases that developers post to an online repository (GitHub), we examine whether a developer's exposure to a company's programming tools (e.g. Application Programming Interfaces) at a coding event (a 'hackathon') affects their subsequent adoption of these tools. We further examine the co-adoption of different platforms' tools to study the interdependences between platforms (e.g. competition for attention; learning spillovers between tools). We contribute to understanding the economics of digitization and the implementation of platform-based strategies.

*Amount:* \$5,500



### Appendix 3: List of Prospective CIDER Associates

<b>Researcher's Name</b>	<b>Affiliated Faculty/Department/Centre (UBC)</b>
Prof. James Colliander	Pacific Institute of Mathematical Sciences
Prof. David Tindal	Dept. of Sociology
Prof. Wei Cui	Peter A. Allard School of Law
Prof. Cesi Cruz	Dept. of Political sciences/Vancouver School of Economics
Prof. Victoria Lemieux	iSchool (Library, Archival and Information Studies)
Prof. Craig Mitton	School of Population and Public Health
Prof. Kimberlyn McGrail	School of Population and Public Health, PopData, BC
Prof. Kai Li	Sauder School of Business
Prof. Vanessa Alvarez	Sauder School of Business
Prof. Gene Lee	Sauder School of Business
Prof. Ken Kikkawa	Sauder School of Business
Prof. Dale Griffin	Sauder School of Business
Prof. Will Gornall	Sauder School of Business
Prof. Markus Baldauf	Sauder School of Business
Prof. Rajesh Vijayaraghavan	Sauder School of Business
Prof. Alexander Bleck	Sauder School of Business
Prof. David Clough	Sauder School of Business
Prof. Yi Qian	Sauder School of Business
Prof. David Green	Vancouver School of Economics
Prof. Henry Siu	Vancouver School of Economics
Prof. Joshua Gottlieb	Vancouver School of Economics
Prof. Thorsten Rogall	Vancouver School of Economics
Prof. Munir Squires	Vancouver School of Economics
Prof. Florian Hoffman	Vancouver School of Economics
Prof. Sam Hwang	Vancouver School of Economics
Prof. Marit Rehavi	Vancouver School of Economics
Prof. Michael Devereux	Vancouver School of Economics
Prof. Siwan Anderson	Vancouver School of Economics
Prof. Mauricio Drelichman	Vancouver School of Economics
Prof. Paul Schrimpf	Vancouver School of Economics
Prof. Jesse Perla	Vancouver School of Economics
Prof. Prof. Filipe Valencia	Vancouver School of Economics
Prof. Patrick Baylis	Vancouver School of Economics
Prof. Markus Baldauf	Vancouver School of Economics
Prof. Giovanni Gallipoli	Vancouver School of Economics
Prof. Patrick Francois	Vancouver School of Economics
Prof. Vadim Marmer	Vancouver School of Economics
Prof. Margaret Slade	Vancouver School of Economics
Prof. Francesco Trebbi	Vancouver School of Economics
Prof. Viktoriya Hnatkovska	Vancouver School of Economics



03 May 2019

To: Vancouver Senate

From: Senate Academic Policy Committee

Re: Discontinuing Rolling Graduation for Graduate Students

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The Senate Academic Policy Committee has reviewed the attached proposal from the Faculty of Graduate and Postdoctoral Studies to discontinue rolling graduation for graduate students. A recent review by the Faculty and Enrolment Services has indicated that since the implementation of rolling graduation in 2014, it has resulted in a substantial increase in work for Faculty and program staff for minimal benefit. Students often apply early for graduation in the hope of completing early (i.e., in September or February); however, many not eligible to graduate upon review. Because the records of all students who apply to graduate must be checked, a high application and non-approval rate represents a substantial increase in workload for staff. The review indicated that 33% of applicants for September and February degree conferral were not approved (in contrast to 16% at the standard graduation dates).

As soon as students' programs are closed, they are now able to download from the SSC an official letter that confirms they have completed all degree requirements and are expected to graduate at the next ceremony. This degree completion letter is sufficient for almost all purposes. On the rare occasions it does not a personal letter with clarification is provided by the Faculty.

Therefore, the Committee recommends the following:

**Motion:** *“That Senate approve the changes to Academic Calendar language proposed by the Faculty of Graduate and Postdoctoral Studies that have the effect of discontinuing rolling graduation for graduate students as set out in the attached two-column form.”*

Respectfully submitted,

Dr. Paul Harrison, Chair  
Senate Academic Policy Committee



## UBC Policy Proposal Form Change to Calendar

<b>Faculty:</b> Faculty of Graduate and Postdoctoral Studies <b>Department:</b> N/A <b>Faculty Approval Date:</b> April 15 2019 <b>Effective Session (W or S):</b> W 2019 <b>Effective Academic Year:</b> 2019-2020	<b>Date:</b> 29 March 2019 <b>Contact Person:</b> Dr. Larry Walker (G+PS Senior Associate Dean) <b>Phone:</b> 604-827-5546 <b>Email:</b> lawrence.walker@ubc.ca
<b>Proposed Calendar Entry:</b>  <b><i>Graduation</i></b>  Every candidate for a degree must make a formal application for graduation. Students can make a formal application for graduation via the <a href="#">Student Service Centre (SSC)</a> .  <b>Standard Graduation</b>  The application deadline for May Congregation is February 28. The earliest date to make an application for May Congregation is December 15 of the previous year. The application deadline for November Congregation is August 31. The earliest date to make an application for November Congregation is June 15.  If a student plans to graduate, they must submit an application regardless of whether or not they intend to participate in the scheduled ceremonies. If the request to graduate is not approved by the candidate's faculty, a reapplication for the next congregation will be required.  Applications for May are not acknowledged until the end of March when Graduation Ceremony information is emailed. Acknowledgment for November applications will be emailed at the end of September. The receipt of graduation	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,44,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,44,0,0</a>  <a href="#">Homepage Campus-wide Policies and Regulations</a> Graduation  <b>Present Calendar Entry:</b>  <b><i>Graduation</i></b>  Every candidate for a degree must make a formal application for graduation. Students can make a formal application for graduation via the <a href="#">Student Service Centre (SSC)</a> .  <b>Standard Graduation</b>  The application deadline for May Congregation is February 28. The earliest date to make an application for May Congregation is December 15 of the previous year. The application deadline for November Congregation is August 31. The earliest date to make an application for November Congregation is June 15.  If a student plans to graduate, they must submit an application regardless of whether or not they intend to participate in the scheduled ceremonies. If the request to graduate is not approved by the candidate's faculty, a reapplication for the next congregation will be required.  Applications for May are not acknowledged until the end of March when Graduation Ceremony information is emailed. Acknowledgment for November applications will be emailed at the end of September. The receipt of graduation



information does not confirm the satisfactory completion of the degree program. The faculty completes this approval process and Senate then confers successful candidates. Students can access the SSC one week prior to the ceremonies to confirm conferral of the degree.

No student will receive a graduation diploma until all academic fees have been fully paid (see [Financial Hold](#)).

Please see [Current Students](#) and [Graduation at UBC](#) for the latest information on graduation.

**Graduate students should consult the Deadlines section of the Faculty of Graduate and Postdoctoral Studies website for program completion deadlines.**

#### **M.D. Degree, Faculty of Medicine - Rolling Graduation**

The general regulation for graduation notwithstanding, M.D. degrees may be approved by Senate during the Winter Session; however, graduation ceremonies (Congregation) are only held in May and November of each year. Although the granting of a degree will be noted on the student's transcript once approved by the Senate, degree certificates will normally only be issued once the degree is conferred at or after the Congregation following approval.

For application deadlines and expected approval dates, please see the Faculty of Medicine [website](#).

#### **Students Completing Degree Requirements at Other Institutions**

Students completing degree requirements at another institution are also reminded that, because of the delay in obtaining official transcripts, all applications for degrees for such students will be treated by Enrolment Services as applications for fall graduation.

Please see [Current Students](#) and [Graduation at UBC](#) for the latest information on graduation.

information does not confirm the satisfactory completion of the degree program. The faculty completes this approval process and Senate then confers successful candidates. Students can access the SSC one week prior to the ceremonies to confirm conferral of the degree.

No student will receive a graduation diploma until all academic fees have been fully paid (see [Financial Hold](#)).

Please see [Current Students](#) and [Graduation at UBC](#) for the latest information on graduation.

#### **~~Graduate Programs—Rolling Graduation~~**

~~The general regulations for graduation notwithstanding, graduate degrees may be approved by Senate at any regular meeting of the Senate during the Winter Session; however, graduation ceremonies (Congregation) are only held in May and November of each year. Although the granting of a degree will be noted on the student's transcript once approved by the Senate, degree certificates will normally only be issued once the degree is conferred at or after the Congregation following approval.~~

~~For more information on rolling graduation, please see the Faculty of Graduate Studies and Postdoctoral Studies website.~~

~~For application for graduation and program completion deadlines, please see [Dates and Deadlines](#) or the [Deadlines](#) section of the Faculty of Graduate and Postdoctoral Studies website.~~

#### **M.D. Degree, Faculty of Medicine - Rolling Graduation**

The general regulation for graduation notwithstanding, M.D. degrees may be approved by Senate during the Winter Session; however, graduation ceremonies (Congregation) are only held in May and November of each year. Although the granting of a degree will be noted on the student's transcript once approved by the Senate, degree certificates will normally only be issued once the degree is conferred at or after the



	<p>Congregation following approval.</p> <p>For application deadlines and expected approval dates, please see the Faculty of Medicine <a href="#">website</a>.</p> <p><b>Students Completing Degree Requirements at Other Institutions</b></p> <p>Students completing degree requirements at another institution are also reminded that, because of the delay in obtaining official transcripts, all applications for degrees for such students will be treated by Enrolment Services as applications for fall graduation.</p> <p>Please see <a href="#">Current Students</a> and <a href="#">Graduation at UBC</a> for the latest information on graduation.</p> <p>***</p> <p><b>Type of Action:</b></p> <ul style="list-style-type: none"><li>• Remove the section on rolling graduation for graduate students.</li><li>• Add advice to graduate students to see the G+PS website for information about program completion deadlines.</li></ul> <p><b>Rationale for Proposed Change:</b></p> <p>G+PS and Enrolment Services are recommending that rolling graduation for graduate students (the conferral of graduate degrees by Senate in September and February, in addition to the standard graduation dates of May and November) be discontinued.</p> <p>Rolling graduation was introduced in 2014 but a recent review by G+PS and Enrolment Services has indicated that it has resulted in a substantial increase in work for G+PS and program staff for minimal benefit. Students have begun applying very early for graduation in the hope of completing early (i.e., in September or February). This has led to a large increase in the number who are not approved for graduation on first application. Because the records of all students who apply to graduate must be checked, a high application and non-approval rate represents a substantial increase in workload for staff. The review indicated that 33% of applicants for</p>
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	<p>September and February degree conferral were not approved (in contrast to 16% at the standard graduation dates).</p> <p>As soon as students' programs are closed, they are now able to download from the SSC an official letter that confirms they have completed all degree requirements and are expected to graduate at the next ceremony. This degree completion letter is sufficient for almost all purposes. On the rare occasions it does not (the last request was in 2012), a personal letter with clarification is provided by G+PS.</p>
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3 May 2019

To: Vancouver Senate

From: Senate Admissions Committee

Re: a) English Language Admission Standard: English Language Competence (approval)  
b) Bachelor of Arts and Bachelor of Fine Arts – Readmission (approval)  
c) Non-Degree Studies Application Deadlines (approval)

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The Committee has reviewed the following proposals and is pleased to recommend them to Senate for approval.

a) English Language Admission Standard: English Language Competence – Revisions to Calendar Entry (approval)(circulated)

The Committee has reviewed and recommends to Senate for approval revisions to English language competence requirements for applicants to direct-entry undergraduate programs. Applicants may demonstrate English language competence by completion of four or more consecutive years of full-time education in English. Proposed revisions also include editorial changes to remove outdated information, including reference to the BC English 12 provincial examination and English language proficiency tests that are no longer available.

**Motion:** *That Senate approve changes to English Language Admission Standard (English Language Competence, English Language Proficiency Tests, and Waiver of English Language Admission Standard) requirements for applicants to direct-entry undergraduate programs, effective for entry to the 2020 Winter Session and thereafter.*

b) Bachelor of Arts and Bachelor of Fine Arts – Readmission (approval)(circulated)

The Committee has reviewed and recommends for approval changes in readmission requirements for students in the Bachelor of Arts and Bachelor of Fine Arts programs. Currently, students who have failed a Writing Component course twice are required to discontinue from the Faculty and leave UBC for one academic year and complete an articulated equivalent of the writing course at another institution before applying for readmission. The proposed changes allow students who have failed the Writing Component course twice but are otherwise in good standing to continue in their degree program, with a reduced course load.

**Motion:** *That Senate approve readmission requirements for students in the Bachelor of Arts and Bachelor of Fine Arts programs, effective for the 2018 Winter Session and thereafter.*



c) Non-Degree Studies Application Deadlines (approval)(circulated)

The Committee has reviewed and recommends to Senate for approval changes in application and document deadlines for non-degree entry. The proposed changes will improve the application process for prospective students and allow visiting students to meet a deadline that will allow them to review available course offerings and obtain a letter of permission from the home institution in a more timely manner.

***Motion:*** *That Senate approve proposed changes to application and document deadlines for non-degree applicants, effective for entry to the 2019 Winter Session and thereafter.*

Respectfully submitted,  
Prof. Carol Jaeger, Chair  
Senate Admissions Committee



## Admissions Proposal Form Vancouver Campus

<b>Faculty/School:</b> Enrolment Services <b>Dept./Unit:</b> Undergraduate Admissions <b>Faculty/School Approval Date:</b> N/A <b>Effective Session:</b> 2020W	<b>Date:</b> April 23, 2019 <b>Contact Person:</b> Mr. Sam Saini <b>Phone:</b> 250.807.3615 <b>Email:</b> sam.saini@ubc.ca
<b>Type of Action:</b> Revise the English language competence requirement for undergraduate degree applicants.	
<p><b>Rationale:</b> The English Language Admission Standard (ELAS) is one of UBC's most important admission requirements for all students applying to an undergraduate degree program. Presently, ELAS is applied as a singular standard that all undergraduate programs at the University share, with some exceptions. Those exceptions include admission to programs such Vantage College (Vancouver), the English Foundation Program (Okanagan), and the Conditional Admission Program (Vancouver), where lower test scores are acceptable for admission.</p> <p>More extensive changes to ELAS are currently being considered but one change in particular is required more urgently due to changes in the BC high school curriculum. Specifically, the BC English 12 provincial exam is being eliminated. With the BC provincial exam no longer in place, UBC will have lost an important standardized assessment used to make admission decisions for an applicant pool that has a growing number of international students. BC English 12 course grades have become increasingly dubious, with many students admitted with high course grades in the spring, only to have their offers rescinded in the summer due to very poor provincial exam results. In other words, the BC English Provincial Exam was a tool that safeguarded against grade volatility, and as of the 2020W admission cycle, it will be gone.</p> <p>In response to the elimination of the BC English 12 provincial exam, we propose that the "years of attendance" element of ELAS be adjusted to four years for all undergraduate applicants. A large portion of our applicant pool have spent their entire education in English language schools and do not need to demonstrate further proficiency in English. This element of our policy is also the most common way applicants meet ELAS. The recommendation to increase the years of attendance required for admission is based upon studies that suggests that fluency in English generally occurs in a four to seven timeframe for most students.</p>	

The current possibility of satisfying ELAS with three years of study in Canadian curriculum schools was implemented based upon operational needs, not on how learners acquire language. Additionally, with the English 12 provincial exam no longer available to contextualize English teaching in BC, UBC must ensure that students, particularly international students, who meet the ELAS through years of study are adequately prepared.

When this change was first considered, secondary school counsellors along with our initial review committee felt that moving to five years of attendance in an English language system would be more appropriate to meet ELAS (and would be more in line with what is suggested in the academic literature regarding language acquisition). However, concerns surrounding enrolment and international recruitment were voiced should UBC move from three years to five years in a short time frame. For these reasons, four years of attendance to meet the English requirement was deemed a reasonable compromise.

This change will pose no real impact for domestic students who have been educated in English speaking countries and schools for most of their education, but will require more international students to present tests scores for the purposes of satisfying English requirements. Again, this is a critical development when considering that international students in BC will no longer be required to write the provincial exam in English 12. The addition of one more year of study is needed to assess English requirements without any standardized assessment.

Other changes being proposed include updates to outdated information such as the removal of references to English language proficiency tests that are no longer available.

<p><b>Proposed Academic Calendar Entry:</b></p> <p><a href="#">Homepage (draft) Admissions English Language Admission Standard</a> English Language Competence</p>	<p><b>Academic Calendar URL:</b></p> <p><a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,19,911,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,19,911,0</a></p> <p><b>Present Academic Calendar Entry:</b></p> <p><a href="#">Homepage (draft) Admissions English Language Admission Standard</a> English Language Competence</p>
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## English Language Competence

As English is the language of instruction at UBC, all applicants, regardless of country of origin or of citizenship status, will be required to demonstrate competence in the English language prior to admission. Competence is expected in all four of the following skills: listening, reading, speaking, and writing. **Please note that meeting the minimum English language competence requirements as listed below does not, by itself, guarantee admission to any program**

With the exception of applicants to the Faculty of Graduate Studies, applicants may demonstrate English language competence by one of the following:

- **Completion of four or more** consecutive years of full-time education in English in a country where English is the principal language, **or at a recognized international secondary school that uses English as the language of instruction but operates in a country where the primary language is not English,** as determined by UBC. Such education must include BC Grade 12 English or equivalent and can be in a combination of secondary and post-secondary education.
- a minimum final English (non-ESL) grade in one of the following:

## English Language Competence

As English is the language of instruction at the UBC Okanagan campus, all applicants, regardless of citizenship status or country of origin, will be required to demonstrate competence in the English language prior to admission. Competence is expected in all four of the following skills: listening, reading, speaking, and writing.

~~This requirement is distinct from the Language Proficiency Index (LPI) requirement for first-year English courses and Science One at UBC.~~

With the exception of applicants to the Faculty of Graduate Studies, applicants may demonstrate English language competence by one of the following:

- ~~three consecutive years of full-time education in English in Canada. Such education must include BC Grade 12 English or equivalent and can be in a combination of secondary and post-secondary education;~~
- four consecutive years of full-time education in English in a country where English is the principal language, as determined by UBC. Such education must include BC Grade 12 English or equivalent and can be in a combination of secondary and post-secondary education. ~~Years completed in a recognized international school, where English is the language of instruction, may be eligible for inclusion in the required years of instruction;~~

IB English A1 or A2 (Standard or Higher)	5	<ul style="list-style-type: none"><li>a minimum final English (non-ESL) grade in one of the following:</li></ul> <table><tr><td><del>BC English 12 provincial exam (or equivalent<sup>1</sup>)</del></td><td><del>70%</del></td></tr><tr><td><del>BC English Literature 12 provincial exam (or equivalent<sup>1</sup>)</del></td><td><del>70%</del></td></tr><tr><td>IB English A1 or A2 (Standard or Higher)</td><td>5</td></tr><tr><td>AP English Language and Composition</td><td>4</td></tr><tr><td>AP English Literature and Composition</td><td>4</td></tr><tr><td>GCE Advanced-Level English</td><td>B</td></tr></table> <p><sup>1</sup><del>In an approved school or country where English is the principal language. Grade scale may be adjusted for different grading practices.</del></p>	<del>BC English 12 provincial exam (or equivalent<sup>1</sup>)</del>	<del>70%</del>	<del>BC English Literature 12 provincial exam (or equivalent<sup>1</sup>)</del>	<del>70%</del>	IB English A1 or A2 (Standard or Higher)	5	AP English Language and Composition	4	AP English Literature and Composition	4	GCE Advanced-Level English	B
<del>BC English 12 provincial exam (or equivalent<sup>1</sup>)</del>	<del>70%</del>													
<del>BC English Literature 12 provincial exam (or equivalent<sup>1</sup>)</del>	<del>70%</del>													
IB English A1 or A2 (Standard or Higher)	5													
AP English Language and Composition	4													
AP English Literature and Composition	4													
GCE Advanced-Level English	B													
AP English Language and Composition	4													
AP English Literature and Composition	4													
GCE Advanced-Level English	B													
<ul style="list-style-type: none"><li>successful completion of the equivalent of four years of full-time instruction in a school/institution in Canada in which the major language of instruction is other than English, but where the level of English proficiency required is equivalent to that in English-language schools or institutions in Canada. Such education must include the equivalent to BC Grade 12 English and can be a combination of secondary and post-secondary education (this will include applicants from CEGEPs who have completed English as a first language);</li><li>graduation from a recognized degree program at an accredited university at which English is the primary language of instruction and</li></ul>														

<del>BC English 12 provincial exam (or equivalent<sup>1</sup>)</del>	<del>70%</del>
<del>BC English Literature 12 provincial exam (or equivalent<sup>1</sup>)</del>	<del>70%</del>
IB English A1 or A2 (Standard or Higher)	5
AP English Language and Composition	4
AP English Literature and Composition	4
GCE Advanced-Level English	B

<sup>1</sup>~~In an approved school or country where English is the principal language. Grade scale may be adjusted for different grading practices.~~

<ul style="list-style-type: none"><li>successful completion of the equivalent of four years of full-time instruction in a school/institution in Canada in which the major language of instruction is other than English, but where the level of English proficiency required is equivalent to that in English-language schools or institutions in Canada. Such education must include the equivalent to BC Grade 12 English and can be a combination of secondary and post-secondary education (this will include applicants from CEGEPs who have completed English as a first language);</li><li>graduation from a recognized degree program at an accredited university at which English is the primary language of instruction and</li></ul>
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<p>in a country where English is the principal language, as determined by UBC;</p> <ul style="list-style-type: none"><li>• successful completion of 6 credits of post-secondary first-year English studies for which UBC grants transfer credit;</li><li>• successful completion of the <a href="#">UBC Vantage College program</a> meets the English Language Admission standard for all direct-entry undergraduate degree programs.</li><li>• the competence standard indicated on one of the tests of English language proficiency as listed in the table <a href="#">English Language Proficiency Tests and Programs</a> that evaluates skills in listening, reading, speaking, and writing.</li></ul>	<p>in a country where English is the principal language, as determined by UBC;</p> <ul style="list-style-type: none"><li>• successful completion of 6 credits of post-secondary first-year English studies for which UBC grants transfer credit;</li><li>• successful completion of the <a href="#">UBC Vantage College program</a> meets the English Language Admission standard for all direct-entry undergraduate degree programs.</li><li>• the competence standard indicated on one of the tests of English language proficiency as listed in the table <a href="#">English Language Proficiency Tests and Programs</a> that evaluates skills in listening, reading, speaking, and writing.</li></ul>
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<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,19,912,0>

## English Language Proficiency Tests

	Test	Minimum Competence for Undergraduate Admission <sup>1</sup>	Minimum Competence for Entry to the Conditional Admission Program <sup>4</sup>	<del>Minimum Competence for Vantage College</del>
<del>GAE</del>	<del>Certificate in Advanced English<sup>3</sup></del>	<del>B</del>	<del>C</del>	
CAEL	Canadian Academic English Language Assessment ( <del>Computer edition and Paper-based</del> )	Overall 70	Overall 60 with no sub-test below 50	<u>Overall 50</u>
	<del>With the speaking sub-test</del>	<del>60</del>	<del>50</del>	
CEL	UBC Certificate in English Language <sup>2</sup>	600	500	<u>400</u>
<del>CPE</del> Cambridge English Qualifications <sup>3</sup>	<del>Certificate of Proficiency in English<sup>3</sup></del> <u>B2 First</u> <u>C1 Advanced</u> <u>C2 Proficiency</u>	<del>C</del> <u>180</u>	<del>CAE<sup>3</sup>:C</del> <u>170</u>	<u>160</u>
IELTS	International English Language Testing System (Academic)	6.5 with no part less than 6.0	6.0 with no part less than 5.5	<u>5.5 overall</u> <u>Minimum 5.0 Speaking and Listening</u> <u>Minimum 5.0 Reading and Writing</u>
<del>MELAB</del>	<del>Michigan English Language Assessment Battery</del>	<del>85 final score, with 3 in the speaking test</del>	<del>80 final score</del>	
PTE	Pearson Test of English (Academic)	Overall Score: 65	Overall Score:60	<u>Overall Score: 48</u>
		Reading: 60	Reading: 55	<u>Reading: 43</u>
		Listening: 60	Listening: 55	<u>Listening: 43</u>

		Writing: 60	Writing: 55	<u>Writing: 43</u>
		Speaking: 60	Speaking: 55	<u>Speaking: 43</u>
TOEFL	Test of English as a Foreign Language <sup>5</sup>			
	<del>Either the Paper-based test</del>	55	52	
	<del>With the TWE (Test of Written English)</del>	4.0	3.0	
	<del>Or the Internet-based test</del>	Overall Score: 90	Overall Score: 82	<u>Overall Score: 70</u>
		Reading: 22	Reading: 20	<u>Reading: 16</u>
		Listening: 22	Listening: 20	<u>Listening: 16</u>
		Writing: 21	Writing: 19	<u>Writing: 16</u>
		Speaking: 21	Speaking: 19	<u>Speaking: 16</u>
<sup>1</sup> Unless otherwise stated, the score is the minimum on each part of the examination. Minimum scores must be achieved in a single sitting of the test (i.e., scores across multiple instances of a test may not be used to satisfy minimum component requirements). Tests taken more than two years prior to application for admission will not be considered.				
<sup>2</sup> See the <a href="#">UBC English Language Institute</a> for further details.				
<sup>3</sup> Administered by the <del>University of Cambridge ESOL Examinations organization</del> <a href="#">Cambridge Assessment English</a> .				
<sup>4</sup> Undergraduate applicants who exceed admission requirements but who present an English language proficiency test score below the minimum required for direct entry to a degree program may be considered for the <a href="#">Conditional Admission Program</a> through UBC's English Language Institute.				
<sup>5</sup> <u>The TOEFL revised Paper delivered test are eligible for consideration and reviewed on an individual basis</u>				

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,19,913,0>

Proposed Calendar Entry:

### Waiver of the English Language Admission Standard

A student should consider arranging to meet the requirement through regular means in the even that their request for a waiver of the requirement cannot be granted. To request a waiver, students should send to Admissions:

- a brief letter or email explaining why they believe the requirement should be waived;
- a letter or recommendation from the student's high school English teacher, guidance counselor, principal, or headmaster that attests the student's level of English proficiency is close to, or equal to, that of a native speaker. The letter should provide information as to how the writer may be contacted (including an email address if possible);
- an official transcript of grades including the student's interim senior year or Grade 12 marks and predicted IB or AP grades (if not already sent); and any additional evidence that may reflect the student's English competence such as achievement test scores (e.g., Scholastic Aptitude Test [SAT] scores).

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,19,913,0>

Present Calendar Entry:

### Waiver of the English Language Admission Standard

~~Students who have studied full-time for at least four years at a recognized international school where English is the language of instruction, but in a country where English is not the principal language, may be eligible for a waiver of the English Language Admission Standard.~~ A student should consider arranging to meet the requirement through regular means in the even that their request for a waiver of the requirement cannot be granted. To request a waiver, students should send to Admissions:

- a brief letter or email explaining why they believe the requirement should be waived;
- a letter or recommendation from the student's high school English teacher, guidance counselor, principal, or headmaster that attests the student's level of English proficiency is close to, or equal to, that of a native speaker. The letter should provide information as to how the writer may be contacted (including an email address if possible);
- an official transcript of grades including the student's interim senior year or Grade 12 marks and predicted IB or AP grades (if not already sent); and
- any additional evidence that may reflect the student's English competence such as achievement test scores (e.g., Scholastic Aptitude Test [SAT] scores).



	<p>Action: to remove reference to recognized international school.</p> <p>Rationale: This is a technical edit. UBC has long accepted recognized international schools as counting in the 4 years of attendance method to meet ELAS so this edit will remove reference to recognized international school piece while preserving the waiver process</p>
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***BA > Readmission – remove wording***

<b>Category: 2 Faculty: Arts</b> <b>Department: Arts Academic Advising</b> <b>Faculty Approval Date: Feb. 14, 2019</b> <b>Effective Session (W or S): W</b> <b>Effective Academic Year: 2018</b>	<b>Date: November 27, 2018</b> <b>Contact Person: Nancy Campbell</b> <b>Phone: 74257</b> <b>Email: nancy.campbell@ubc.ca</b>
<b>Calendar</b> <b>Navigation:</b> <a href="#">Homepage</a> <a href="#">Faculties, Colleges, and Schools</a> <a href="#">The Faculty of Arts Bachelor of Arts</a> Readmission  <b>Proposed Calendar Entry:</b>  <b>Readmission</b>  <b>Readmission after Academic Leave or Voluntary Withdrawal from Studies</b>  Students who voluntarily left their UBC studies (without being required to do so) may apply for readmission to the same or a different degree program through Enrolment Services. See <a href="#">Readmission</a> .  <b>Readmission after a Failed Year, Required to Withdraw</b>  [...]	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,197,282,1579">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,197,282,1579</a>  <b>Present Calendar Entry:</b>  <b>Readmission</b>  <b>Readmission after Academic Leave or Voluntary Withdrawal from Studies</b>  Students who voluntarily left their UBC studies (without being required to do so) may apply for readmission to the same or a different degree program through Enrolment Services. See <a href="#">Readmission</a> .  <del><b>Readmission after being Required to Discontinue from the Faculty</b></del>  <del>Students who fail two attempts at the Writing Component of the Writing and Research Requirement will be required to discontinue from the Faculty of Arts.</del>  <del>B.A. students who were required to discontinue must sit out for one full academic year, including the following Winter Session and the subsequent Summer Session. During this time, they must successfully complete an equivalent to a Writing Component course at another approved post-secondary institution. Students are encouraged to consult Arts Academic Advising.</del>  <del>During their year away, or at any later time, students may submit an application for readmission to the B.A. degree program to</del>

	<p><del>Enrolment Services. Normal deadlines apply.</del></p> <p><b>Readmission after a Failed Year, Required to Withdraw</b></p> <p>[...]</p> <p><b>Type of Action:</b> Remove section.</p> <p><b>Rationale:</b> To support and align with proposed changes to Faculty of Arts continuation requirements in relation to the Writing and Research Requirement for Bachelor of Arts students. See detailed rationale under the BFA section.</p>
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***BFA > Readmission – remove wording***

<p><b>Calendar Navigation:</b> <a href="#">Homepage</a> <a href="#">Faculties, Colleges, and Schools</a> <a href="#">The Faculty of Arts</a> <a href="#">Bachelor of Fine Arts</a> Readmission</p> <p><b>Proposed Calendar Entry:</b></p> <p><b>Readmission</b></p> <p>[...]</p> <p><b>Readmission after Academic Leave or Voluntary Withdrawal from Studies</b></p> <p>Students who voluntarily left their UBC studies (without being required to do so) may apply for readmission to the same or a different degree program through Enrolment Services. However, B.F.A. students, in particular those in cohort-based programs, should be aware that it may not be possible for them to re-enter their program upon their return; students are strongly advised to consult their Departmental Advisor prior to taking a Leave. See <a href="#">Academic Leave</a>.</p> <p><b>Readmission after a Failed Year, Required to Withdraw</b></p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,197,283,1595">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,197,283,1595</a></p> <p><b>Present Calendar Entry:</b></p> <p><b>Readmission</b></p> <p>[...]</p> <p><b>Readmission after Academic Leave or Voluntary Withdrawal from Studies</b></p> <p>Students who voluntarily left their UBC studies (without being required to do so) may apply for readmission to the same or a different degree program through Enrolment Services. However, B.F.A. students, in particular those in cohort-based programs, should be aware that it may not be possible for them to re-enter their program upon their return; students are strongly advised to consult their Departmental Advisor prior to taking a Leave. See <a href="#">Academic Leave</a>.</p> <p><del><b>Readmission after being Required to Discontinue from the Faculty</b></del></p>
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[...]

~~Students who fail two attempts at the Writing Component of the Writing and Research Requirement will be required to discontinue from the Faculty of Arts.~~

~~B.F.A. students who were required to discontinue must sit out for one full academic year, including the following Winter Session and the subsequent Summer Session. During this time, they must successfully complete an equivalent to a Writing Component course at another approved post-secondary institution. Students are encouraged to consult Arts Academic Advising.~~

~~During their year away, or at any later time, students may submit an application for readmission to the B.F.A. degree program to Enrolment Services. Normal deadlines apply. However, B.F.A. students, in particular those in cohort-based programs, should be aware that it may not be possible for them to re-enter their program upon their return; students are strongly advised to consult their Departmental Advisor.~~

### **Readmission after a Failed Year, Required to Withdraw**

[...]

**Type of Action:** Remove section.

**Rationale:** To support and align with proposed changes to Faculty of Arts continuation requirements in relation to the Writing and Research Requirement for Bachelor of Fine Arts students.

**Type of Action:** Remove requirement for Bachelor of Arts students who have failed a Writing Component course twice to discontinue from the Faculty; replace with registration restriction. Add wording to

	<p>clarify requirements for ongoing continuation for students on Academic Probation. <b>NOTE:</b> The Faculty of Arts would like to apply this policy beginning with continuation evaluations for 18W, which occur in May, 2019. For this reason, this proposal has an effective date of 18W.</p> <p><b>Rationale:</b> All students in the Faculty of Arts are required to complete the Writing and Research Requirement as part of their undergraduate studies. If the Writing Component of this requirement is failed twice, students are Required to Discontinue regardless of how they performed on the rest of their courses or their sessional average. They must then leave UBC for at least one full academic year and complete an articulated equivalent of a writing course at another institution before applying for readmission.</p> <p>Since the Required to Discontinue standing was introduced in 2011W, 14 students have received this standing. Of these, 7 have already returned to UBC from taking credits at college, 4 have not returned, and 3 only received the standing in 17W so it is too early to determine if they plan to return.</p> <p>In reviewing this policy and the resulting data, the Faculty of Arts has determined that the policy does not result in outcomes that are in the best interests of Arts students or the Faculty of Arts. The Senate Curriculum committee has approved an associated proposal to amend Arts' continuation policy to permit students who have failed a Writing Component course twice but who are otherwise in good academic standing to continue in their degree program at UBC. Rather than asking them to leave to attempt a Writing Component course at college, Arts would prefer to give them an opportunity to complete it here, where we can provide</p>
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	<p>them with support and monitor their progress. Not only is this preferable from an academic perspective, but we believe that students who are already established on campus and otherwise in good academic standing will experience better wellness outcomes if they are permitted to continue studying in their program, rather than having to leave it for a year to complete a course elsewhere.</p> <p>As part of the support Arts would provide to students in this situation, we propose reducing the maximum course load for students with two failed attempts at the Writing Component to 3 courses (normally 9 credits) per Winter Session Term, and no more than 9 credits distributed over the entire Summer Session, with a maximum of 6 credits per Summer Session Term. This is a reduction from regular Arts registration eligibility of up to 6 courses per Winter Session Term and up to 12 credits distributed over the entire Summer Session (maximum 9 credits per Summer Session Term). If the student registers in a Writing Component course, this reduced load will ensure they have additional time to focus on the successful completion of the course while also ensuring they retain the Winter Session full-time standing necessary for many funding, housing and immigration requirements. If they choose not to register for a Writing Component course, the reduced load will provide them with additional time to apply themselves to improving their academic research and writing skills independently in the context of their other courses. This restriction will continue until the student passes the Writing Component course.</p>
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## UBC Admissions Proposal Form

<b>Department: Undergraduate Admissions</b> <b>Effective Session: 2019W Term 1</b> <b>Year for Change: 2019</b>	<b>Contact Person: Natalie Fallis</b> <b>Email: Natalie.fallis@ubc.ca</b>
URL: <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,295,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,295,0,0</a>	URL: <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,295,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,295,0,0</a>
<b>Proposed Calendar Entry:</b>  <b>Application and Document Deadlines for Non-Degree Entry</b>  The following deadlines pertain to Visiting Students, Access Study applicants, Concurrent Study applicants, Unclassified Studies, and all others applying to enrol in UBC courses through Non-Degree Studies. The application as well as all required and supporting documentation must be submitted by these dates. For more information, visit the <a href="#">Non-Degree Studies</a> website.  Summer Session Terms 1 and 2 (May start) deadline: March 15  Winter Session Term 1 (September start) deadline: <b>July 15</b>  Winter Session Term 2 (January start) deadline: <b>October 15*</b>  *excluding Visiting students who must apply by July 15 for the winter session.	<b>Present Calendar Entry:</b>  <b>Application and Document Deadlines for Non-Degree Entry</b>  The following deadlines pertain to Visiting Students, Access Study applicants, Concurrent Study applicants, Unclassified Studies, and all others applying to enrol in UBC courses through Non-Degree Studies. The application as well as all required and supporting documentation must be submitted by these dates. For more information, visit the <a href="#">Non-Degree Studies</a> website.  Summer Session Terms 1 and 2 (May start) deadline: March 15  Winter Session Term 1 (September start) deadline: <del>June 15</del>  Winter Session Term 2 (January start) deadline: <del>June 15</del>  <b>Type of Action:</b> revise application deadlines for Winter Session terms 1 and 2.  <b>Rationale:</b>  Reflecting upon the proposed Non-Degree application deadlines below, the over-arching rationale in submitting this request is to bring about a regular and manageable structure to our admissions process that is easily understood by prospective students and communicated by forward-facing staff. Through the implementation of these deadlines we will be in a position to provide a smooth application

# THE UNIVERSITY OF BRITISH COLUMBIA

	<p>experience for our prospective students without having to divide them into separate groups based on mode of study (distance/on-campus) requested, as we currently do. Changing the deadlines also gives our Visiting student applicants a more attainable deadline by which to review our Winter Session course offerings in Term 2 and obtain a letter of permission from their home institution, given that presently this group is held to a June 15<sup>th</sup> deadline for the whole Winter Session, regardless of term. As with our Visiting students, prospective graduate students will be supported by the proposed January intake deadline change in their completion of prerequisite courses required by their desired programs in advance of their September entry. Finally, with the advancement of the September intake deadline to the 15<sup>th</sup> of July and the creation of a January entry point with an October 15<sup>th</sup> deadline, we will support a much higher degree of self-agency on the part of those students applying to courses where initial review and approval is called for by the offering program (Law, Haida Gwaii, Dechinta, etc.).</p> <p>Visiting students will need apply by either July 15<sup>th</sup> for the fall/winter session or March 15<sup>th</sup> for the summer session</p> <p><i>July 15<sup>th</sup> for the September term – currently, the deadline for September term is June 15<sup>th</sup>. However, we believe that this new deadline of July is more realistic, given the surge of applications we get as we approach the start of term. We have found that not as many students are thinking about courses in June, so July still gives us a month and a half to process applications and collect necessary documents, while being late enough to give applicants (especially concurrent high school students) a chance to apply. Students would apply through the regular application.</i></p> <p><i>October 15<sup>th</sup> for the January term (Excluding Visiting Students) – currently, the deadline for January term is June 15<sup>th</sup>. We believe this is far too early for applicants, and would like to offer a more accessible deadline than 6 months prior</i></p>
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# THE UNIVERSITY OF BRITISH COLUMBIA

	<p><i>to the start of term. October 15<sup>th</sup> gives us two and a half months to process applications and collect necessary documents, taking into account that the Admissions team will be busy with acknowledging degree applications, as well as the holiday season. **Students would apply via the Access students' application.</i></p> <p><b><i>March 15<sup>th</sup></i></b> <i>for the Summer Session – currently, the deadline for Summer Session is March 15<sup>th</sup>. We believe that this is a reasonable deadline. The Summer Session is condensed enough that we do not see the need to separate application deadlines for the two terms. Additionally, Access, Unclassified, and Visiting students' registration dates generally fall around late March every year. Students would apply through the regular application.</i></p>
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3 May 2019

To: Senate

From: Admissions Committee

Re: d) Annual Report on Appeals and Other Matters of Delegated Authority  
(information)

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**(i) Policy J-50: *Secondary School Grade Adjustments for Undergraduate Admission to the University***

In December 2009, Senate approved Policy J-50: *Secondary School Grade Adjustments for Undergraduate Admission to the University*. For the purposes of undergraduate direct-entry admission to the University, grades reported for secondary school applicants outside of the BC/Yukon secondary school curricula may be adjusted to accurately assess those grades in terms of their ability to predict future performance at the University.

To date, the policy has been applied to applicants following the Alberta secondary school curriculum. For entry to the 2018 Winter Session, grades presented for admission were adjusted upwards by 4%.

**(ii) Student Mobility Agreements Approved Under Council of Senates Policy C-2: *Affiliations with Other Institutions of Learning***

Under Policy C-2: *Affiliations with Other Institutions of Learning*, the Council of Senates has delegated to the Admissions Committee the authority to approve on its behalf, terms of student mobility agreements for students going to or coming from UBC Vancouver programs.

Since its last report to Senate, the Admissions Committee has approved student mobility agreements with the following institutions:

- UBC and University of Padova
- UBC and University of Washington
- UBC Faculty of Commerce and Business Administration and Nankai University, China
- UBC Faculty of Arts/UBC Faculty of Applied Science and University of Exeter, United Kingdom
- UBC Faculty of Arts and Ambedkar University Delhi, India
- UBC Faculty of Science and Radboud University
- UBC Faculty of Science and University of Gothenburg,
- UBC Faculty of Forestry and University of Helsinki



- UBC Vancouver and Nagoya University
- UBC Faculty of Applied Science and Faculty of Arts and Singapore University of Technology and Design
- UBC Faculty of Applied Science and Stuttgart University
- UBC Faculty of Land and Food Systems & Faculty of Forestry and Kyushu University

### (iii) Appeals on Applications for Admission, Re-admission and Transfer to Programs (information)

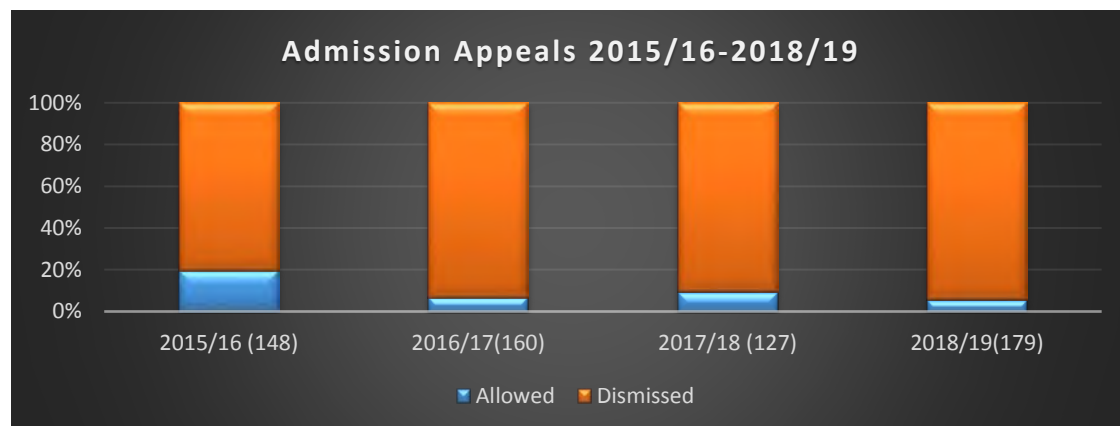
Pursuant to section 37(1)(b) of the *University Act*, the Vancouver Senate has conferred on the Senate Admissions Committee the power to hear final appeals on applications for admission and re-admission to the University. The Admissions Committee also reviews and rules on appeals related to applications for admission/transfer to a Degree or Program.

Between 1 May 2018 and 30 April 2019, the Admissions Committee heard 179 appeals:

- 179 appeals for admission to the University
- 0 appeal for readmission to the University
- 34 appeals for change of degree or program

Of the 179 appeals heard by the Committee, 10 were allowed and 169 were dismissed. As outlined in the Calendar, the Committee may allow an appeal where it decides that a faculty or school may have overlooked or misinterpreted information provided by the applicant, or arrived at a decision without reasonable consideration of mitigating circumstances, or acted contrary to the faculty's published procedures.

As noted in previous reports to Senate, the volume of appeals has increased substantially over the past few years. Despite this increase, the reasons for refusal or revocation have remained relatively stable: in the last two years, the most common reason was applicants failing to meet the University's English language admission standard, followed by applicants failing to meet competitive thresholds and/or University minimum admission requirements. Although the Committee is hearing more appeals, the acceptance rate did not increase proportionately, possibly because the most common reasons for refusal or revocation are based on policies that are quite clear.



At its May 2015 meeting, Senate approved a revised policy on admission appeals which clarified the process and detailed the various routes an appeal may follow. The process distinguishes between appeals for admission versus those for revocations of offers of admission. It provides greater clarity and guidance for potential appellants through standardized forms enumerating the types of documents required to substantiate an appeal. These changes enable appellants to put forward more complete appeals from the outset, and to facilitate improved communication among faculties, Enrolment Services, the Senate Admissions Committee and the appellant. The Committee is of the opinion that direct communication of the right to appeal coupled with a streamlined process has likely contributed to the dramatic increase in the number of appeals submitted.

In May 2017, Senate approved the Committee's request for a reduction in quorum for the consideration of admission appeals. The majority of the Committee's business during the Summer Session is related to admission appeals for the upcoming Winter Session and the Committee often has difficulty reaching quorum during the summer months as many members are away from campus for prolonged periods. Given the number of appeals considered by the Committee each summer, the vast majority of which are considered between June and August, Senate approved a reduced quorum for the consideration of appeals, lowered from five (5) members of the Committee who are members of the Vancouver Senate to three (3) members of the Committee who are members of the Senate.

With a more holistic approach to admission, effective for entry to the 2019 Winter Session, the hope is that there will be fewer revocations of conditional offers of admission. The elimination of the English 12 provincial examination may also impact the number of appeals. In the absence of grading information on the Graduation Literacy Assessment, it is difficult to anticipate the impact, if any, on the number of admission appeals.

**(iv) Nominal Changes to Admission Requirements and Editorial Changes to Calendar Language**

In May 2013, Senate delegated to the Committee final right of approval over nominal changes in admission requirements and editorial changes to Calendar language. From May 2018 until April 2019, the Committee has approved 41 proposals under delegated authority (compared to 33 proposals in the previous reporting period), 28 of which were nominal changes to admission requirements and 13 were student mobility agreements, as per Council of Senates Policy C-2: *Affiliations with Other Institutions of Learning*.

Respectfully submitted,

Prof. Carol Jaeger, Chair  
Senate Admissions Committee

3 May 2019

To: Vancouver Senate

From: Agenda Committee

Re: Draft: Code of Conduct and Conflict of Interest Rules for the Okanagan and Vancouver Senates (discussion)

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The Committee presents a draft *Code of Conduct and Conflict of Interest Rules for the Okanagan and Vancouver Senates* for discussion and feedback. Currently, senators disclose potential or actual conflicts of interest on an ad hoc basis, which are managed with support from the Senate Secretariat. The proposed rules and code of conduct present a comprehensive framework for the disclosure and management of conflicts of interest, and articulate duties and expectations of members of the Senate.

Several Canadian post-secondary institutions have established conflict of interest rules and either an accompanying or stand-alone code of conduct. The structure of these rules vary and are generally organized as follows:

- general statements on the role and expectations of Senators to act in good faith and in the best interest of the institution;
- reference to conflict of interest and disclosure thereof in institution-wide policy on Conflict of Interest applicable to faculty and staff;
- section relating to conflict of interest and disclosure thereof embedded in the procedural document applicable to the academic governing body; and
- formalized by-laws or rules specific to the conflict of interest and/or code of conduct for members of an academic senate.

Section 35.2(4) of the *University Act* sets out a requirement for the senate of special purpose, teaching university to make bylaws for the conduct of business of the senate, including bylaws specifying the duties of members of the senate in conflict of interest situations. While this requirement is not applicable to UBC, it is good governance practice to have a Senate(s) code of conduct and clearly articulated rules and procedures relating to the disclosure and resolution of possible conflicts of interest for members of the Senates.

The proposed rules are circulated herein for comment and feedback, with consultation ongoing over the summer months, following which the Nominating Committee will consider the rules (as amended following consultation) for approval and recommendation to Senate. Adoption of the attached will require a formal change to the *Rules and Procedures of the Vancouver Senate* to include reference to- and applicability of- the rules.

Upon the recommendation of the Committee, the Okanagan Senate Agenda and Nominating Committees will also consider the draft Code of Conduct and Conflict of Interest Rules. As such the proposed rules are written for applicability to both Senates. A similar document will also be developed for the Council of Senates.

The Committee asks that all comments/feedback be forwarded to the Senate Secretariat:  
[amandeep.breen@ubc.ca](mailto:amandeep.breen@ubc.ca).

## **DRAFT: CODE OF CONDUCT AND CONFLICT OF INTEREST RULES FOR THE OKANAGAN AND VANCOUVER SENATES**

### **1. Introduction and Purpose**

The academic governance of the University is vested with the Senates and the Council of Senates.

The powers and duties of the Senates are set out in the *University Act*.

This Code of Conduct (Code) defines the standards of conduct expected of Senators, including with respect to conflict of interest.

### **2. Application**

The Code applies to all members of the following:

- Okanagan Senate
- Vancouver Senate

### **3. Definitions**

For the purpose this Code, the following definitions are used throughout:

*Chair* shall mean the President as the Chair of the Okanagan Senate and Vancouver Senate, or a chair of a Committee of the Okanagan or Vancouver Senate, as context requires

*Code* shall mean this Code of Conduct, as amended, supplemented, revised or restated from time to time

*Okanagan Senate* shall mean the Okanagan Senate of the University

*Private Duty* shall mean any duty that a Senator owes to someone other than the University.

*Private Interest* shall mean any interest substantial enough that decisions of Senate could result in a personal gain for the Senator

*Secretary* shall mean the Registrar, as outlined in the *University Act*.

*Vancouver Senate* shall mean the Vancouver Senate of the University

*University* shall mean the University of British Columbia

*University Act* shall mean the law titled as such in the Province of British Columbia with the citation Revised Statutes of British Columbia 1996, chapter 468 and its successor legislation

## **4. Duties and Expectations of Senators**

### **4.1 Duties**

**Duties to the University:** Senators must act honestly and in good faith with a view to serving the best interests of the University. Senators are required to:

- be honest in their dealing with the University and others on behalf of the University;
- disclose to the Senate any personal interests that they hold that may conflict with the interests of the University in accordance with the requirements set out in this Code;
- exercise independent judgement and not act as a delegate or representatives of any other group or organization internal or external to the University;
- maintain the confidentiality of any information submitted to the Senators in confidence, and in accordance with the requirements set out in this Code and any applicable policies; and
- refrain from any actions, direct or indirect, that may compromise the effective implementation of decisions of the Senate. However, this should not be taken to include any statement a Senator may make on their opinion of a Senate decision or discussion.

**Duty of Knowledge:** Senators must make a reasonable effort to be familiar with and be generally knowledgeable about:

- the University's mandate, goals, objectives, and operations;
- the community, business and political environments within which the University operates;
- the relevant legislation applicable to the University and Senators; and
- the current governance policies and practices of the University.

**Duty to Disclose:** Senators are encouraged to disclose information within their knowledge that is of significance to a decision before Senate.

## 4.2 Expectations

In fulfilling their responsibilities and duties, Senators are expected to:

- Regularly attend meetings of the Senates and Senate Committees
- act in a manner consistent with the general spirit and intent of the Code;
- devote the necessary time and attention required to prepare for meetings of the Senates and Senate committees;
- participate fully and frankly in the deliberations and discussions of the Senates and Senate committees;
- act in a manner which is courteous to others, including treating others with respect and dignity, with the understanding that agreement is not required or expected in a deliberative forum;
- avoid any situations that impair or have the potential to impair the Senator's independence or impartiality in performing the duties of a Senator;
- acknowledge that the Chair of the Senates is the only official spokesperson of the Senates and act consistent with the Senate's protocols on Senate communications and public comment;
- act in a manner consistent with the trust and confidence placed in the Senates.

## 5. Confidential Information

In the course of their duties, Senators will have access to confidential information relating to the University or its affairs, and may also learn of other confidential or non-public information relating to third parties.

Senators must maintain the confidentiality of all such confidential and non-public information and must not disclose or release any such confidential or non-public information unless authorized by the Vancouver or Okanagan Senate, or relevant Senate Committee, or required by law to do so.

Proceedings in Senate Committees and *in-camera* sessions of the Senates are confidential. Senators must comply with the *Rules and Procedures of the Senates* and any policies that may restrict circulation and disclosure of materials prepared for such sessions, and must hold in confidence all views and opinions expressed by other Senators or individuals in such sessions.

## 6. Conflict of Interest

### 6.1 Definition

A conflict of interest may arise where the Private Interest of a Senator conflicts, potentially conflicts, or appears to conflict with or influence the objective exercise or proper discharge of the Senator's duties to the Senate, including their duty to act



in the best interests of the University.

Conflicts are generally divided into the following categories.

- An **actual conflict of interest** refers to a situation where a Senator exercises a power or performs a duty or responsibility, and in so doing, there is a conflict with the Senator's Private Duty;
- A **potential conflict of interest** refers to a situation where a Private Duty of a Senator could influence the exercise of the Senator's power or performance of his or her duties or responsibilities; and
- An **apparent conflict of interest** refers to a situation where informed people might reasonably hold the apprehension that a conflict of interest exists on the part of a Senator in relation to a Private Duty.

## 6.2 Examples of Conflict of Interest

Some conflicts are quite clear, whereas others are less obvious. Examples of conflict of interests include:

- a. Where a Senator may have or have had personal and/or professional dealings with one or more parties or units involved in the Senate's or Senate Committee's deliberations that may influence or impair his or her judgement in the administration of duties and activities as a member of Senate;
- b. any association or activity, that is, or may reasonably be seen to be, incompatible with the Senator's duties, or cast doubt on the integrity or impartiality of the Senates or the University.

## 7. Dealing with Conflict of Interest

The Nominating Committee Chair, and the Nominating Committee are primarily responsible to interpret and apply the Code's provisions on conflict of interest on behalf of the Senates, as set out in this Code.

### 7.1 Duty to Avoid or Manage

Senators are responsible to recognize conflict of interest and to avoid or manage conflicts of interest in a manner that is consistent with the Senator's duty to act in the best interest of the University and in accordance with requirements set out in this Code.

## **7.2 Conflict of Disclosure Statement**

Every Senator must complete a Conflict of Disclosure Statement (Disclosure Statement) upon his or her initial appointment and update the Disclosure Statement at any time he or she becomes aware of new or additional relevant information, or as required by changed circumstances.

Disclosure Statements are filed with the Secretary to Senate, who will retain the records at the Office of the Senate and provide copies to the Chair of the Nominating Committee.

Where a Senator has disclosed a conflict in the Disclosure Statement, the disclosure and plans to manage the actual, potential or apparent conflict will be reviewed and approved by the Nominating Committee and reported to the Senate at the next Senate meeting.

## **7.3 Ongoing Disclosure**

In addition to filing a Disclosure Statement at the time of appointment to Senate, all Senators have an ongoing duty to disclose an actual, potential or apparent conflict of interest as soon as the issue arises and before the Senate or Senate Committees deal with the matter at issue.

Senators should make their disclosure to the Secretary to Senate and the Nominating Committee Chair.

In the event the Chair of the Nominating Committee has a possible conflict, he or she should make his or her disclosure to the Vice-Chair of the Nominating Committee.

In the event the Chair of Senate had a possible conflict, he or she should make his or her disclosure to the Nominating Committee Chair.

## **7.4 Raising Conflict of Interest Issues**

It is the responsibility of Senators who are aware of an actual, potential or apparent conflict of interest on the part of a fellow Senator to raise the matter for clarification, first individually with the Senator in question and, if unresolved, in writing to the Secretary and Nominating Committee Chair.

If a Senator is aware of an actual, potential or apparent conflict of interest on the part of the Chair, he or she should raise the matter for clarification, first individually with the Chair and, if unresolved, in writing to the Secretary and Nominating Committee Chair.

Repeatedly raising questions of possible conflicts of interest that are without merit is considered to be contrary to the spirit and intent of the Code.

## 7.5 Resolving Conflicts of Interest Issues

Where a possible conflict is identified to the Secretary and Nominating Committee Chair, the following steps will be taken.

- a. In straight-forward cases, the Nominating Committee Chair will review the circumstances and provide the Senator potentially in a conflict of interest with advice on whether a conflict exists and, if so, the steps required to manage the conflict. In all such cases, the Nominating Committee Chair will inform the Nominating Committee of the issue raised and how it was resolved.
- b. In cases where it is not clear whether there is a conflict or how it should be handled, the matter will be referred to the Nominating Committee who will review the circumstances and determine by majority vote if a conflict exists and, if so, the steps required to manage the conflict. If the Senator potentially in a conflict of interest is a member of the Nominating Committee, he or she shall be absent from the discussion and shall not vote on the issue.
- c. The Nominating Committee will advise the Senate *in camera* of each case under subsection (b) and how the has been addressed.

Throughout the process, the Nominating Committee Chair and/or the Nominating Committee may seek advice from the Office of the University Counsel.

Senators must comply with any direction provided by the Nominating Committee Chair or the Nominating Committee to undertake a specified action to manage a conflict of interest.

## 7.6 Conflicts Related to Senate and Senate Committee Agenda Items

Every Senator must declare any conflict of interest in respect of any Senate or Senate committee agenda item as soon as becoming aware of it, whether or not such conflict of interest has previously been disclosed in the Senator's Disclosure Statement.

The Secretary will monitor the subject matter of the Senate or Senate committee agendas for possible conflicts of interest for individual Senators. If the Secretary has reason to believe that an agenda item could result in a conflict of interest for a Senator, the Secretary will alert the Senator, and make reasonable efforts to discuss the issue with the Senator before circulating information to that Senator and so that Senator can make a declaration accordingly.

Where a Senator has a conflict of interest in respect of an agenda item, the Senator:

- a. shall abstain from any discussions or vote concerning such matter that

- may occur during a Senate or Senate Committee meeting;
- b. shall be counted in the quorum for a meeting at which the Senator attends, notwithstanding that the Senator is absented while any matter is considered in respect of which a conflict of interest exists for that Senator.

If a Senator declares a conflict of interest, a summary of the disclosure will be recorded in the minutes of the meeting, as well as any restrictions on the Senator's participation.

Where a conflict of interest is discovered after consideration of a matter, the conflict must be brought to the attention of the Nominating Committee through the Secretary, and appropriately recorded at the first opportunity. If the Nominating Committee determines that the Senator's involvement has, or could be perceived to have, influenced the decision, the Senate or Senate committee must re-examine the matter and may rescind, vary or confirm its decision.

## **7.7 Confidentiality**

Except where disclosure of such information is authorized or required by law or this Code, any information disclosed by any person pursuant to this Code will be held in confidence and will only be available to those persons who need to have access to the information in order to carry out their roles under this Code, for the purposes of this Code.

## **8. Failure to Comply**

Where the Nominating Committee determines that a Senator has failed to comply with the Code, the Committee shall consider the extent to which the Code has been breached and the need for redress and decide on an appropriate course of action, which may include:

- issuing an oral or written reprimand to the Senator;
- requesting the Senator to take appropriate corrective action;
- requesting that the Senate pass a motion of reprimand or censure;

## **9. Reporting Responsibility**

### **9.1 Nominating Committee**

The Nominating Committee has specific responsibilities set out in this Code, which include the interpretation and application of provisions regarding conflicts of interest and to receive information provided by the Secretary or Nominating Committee Chair in respect of conflicts of interest. The Nominating Committee is responsible to report to the Senate regularly on the handling of conflict of interest issues, as well to provide an annual report as set out below in section 9.3, Annual Reporting.

## **9.2 Secretary to Senate**

The Secretary is responsible for providing each Senator, upon appointment or election, with:

- a copy of the Code;
- copies of any written materials with commentary or explanations of provisions of the Code;
- a Disclosure Statement form.

The Secretary is responsible for maintaining a record of Disclosure Statements; such records will normally be retained for a period of three (3) years following the end of a Senator's term.

## **9.3 Annual Reporting**

The Agenda Committee is responsible for reviewing this Code from time to time and recommending to Senate any changes, as necessary.

The Nominating Committee must provide to Senate an annual anonymized summary of conflict of interest disclosures and the actions taken in response.



8 May 2019

To: Vancouver Senate

From: Committee on Appeals on Academic Standing

Re: Annual Report (1 May 2018 – 30 April 2019) (information)

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## Introduction

Section 40(a) of the *Rules and Procedures of the Vancouver Senate* requires committees that derive their powers by delegation from Senate, including the Committee on Appeals on Academic Standing, to report annually to the Vancouver Senate.

Senate has delegated to the Senate Committee on Appeals on Academic Standing authority to hear and dispose of student appeals from decisions of Faculties in matters of academic standing.

## Terms of Reference

Under section 2.4 of the Committee's *Terms of Reference*, the Committee shall allow an appeal where it is found that the decision of the Faculty was arrived at through improper or unfair procedures, and that as a result, a wrong decision on the merits has or may have been arrived at. However, section 2.1 of the *Terms* provides that the Committee has no jurisdiction where the sole question raised in an appeal turns on the exercise of academic judgment by a Faculty.

Section 2.4 of the *Terms* defines "improper or unfair procedures" as including consideration of information that should not have been considered or a failure to consider information that should have been considered.

The application of section 2.4 was in issue in the appeals heard by the Committee during the reporting period.

Section 2.5 provides that if the Committee allows an appeal it can reverse the decision of the Faculty and grant such academic standing to the appellant as it thinks fit or quash the decision of the Faculty and send it back to the Faculty for reconsideration in accordance with proper procedures. The decision of the Committee on an appeal is a final disposition of that appeal. The Vancouver Senate has conferred on the Committee the power of making final decisions pursuant to section 37(1)(b) of the *University Act* (reference: *UBC Calendar, Academic Regulations, Senate Appeals on Academic Standing*, sub-section 2.2).

Students may also appeal to the Committee a refusal by the Registrar to extend the timeline for accepting an appeal beyond the ten (10) business days of being informed in writing of the Faculty's final decision (*Terms*, sections 3.1 and 3.10). But, no appeal on this ground was received in the reporting period.



## Statistics

Under section 2.9 of the *Terms*, the Committee's annual report shall state the number of appeals, their disposition and the general nature of the appeals. Since last reporting to Senate in May 2018, nine (9) appeals were heard by panels of the Committee (as compared with seven (7) in the prior reporting period). The Committee unanimously dismissed all appeals heard. The Committee has been advised that in the past year an additional eleven appeals were presented to the Registrar, of which one (1) was settled with the Faculty prior to hearing, three (3) were withdrawn by the appellants prior to hearing, two (2) were closed due to lack of appellants' response, and five (5) are in progress and expected to be heard by the Committee in the coming weeks.

## The Committee's Practice

After hearing an appeal the panel thanks and excuses the parties from further attendance, then deliberates and decides the outcome in the absence of the parties as soon thereafter as a consensus emerges. The parties are informed by email as to the result of the appeal within a day or so of the Committee's decision. Draft reasons for each decision are circulated to the members of the panel hearing the appeal, and following their approval the reasons are sent by email to the parties.

## Summaries of the Appeals

The following summaries are anonymized to protect privacy and confidentiality.

- The student appealed a decision of the Faculty requiring the student's withdrawal from the program of study due to unprofessional conduct. The Committee held that the Faculty's decision was free from improper or unfair procedures, there was no consideration of information that ought not to have been considered, nor was there failure to consider information that ought properly to have been considered.
- The student appealed a decision of the Faculty requiring the student's withdrawal from the program of study for failing to meet program requirements. The Committee held that the Faculty's decision was free from improper or unfair procedures, there was no consideration of information that ought not to have been considered, nor was there failure to consider information that ought properly to have been considered.
- On four appeals from decisions of a particular Faculty, students appealed the Faculty's cancellation of a practicum placement due to the students' failure to meet mandatory pre-practicum requirements. The Committee held that the Faculty's decisions were free from improper or unfair procedures, there was no consideration of information that ought not to have been considered, nor was there failure to consider information that ought properly to have been considered.
- The student appealed a decision of the Faculty requiring the student's withdrawal from the program of study following a failed year. The Committee held that the Faculty's decision was free from improper or unfair procedures, there was no consideration of information that ought not to have been considered, nor was there failure to consider information that ought properly to have been considered.
- The student appealed a decision of the Faculty denying a very belated request for retroactive 'W' standing for 'Failed' courses. The Committee held that the Faculty's decision was free from improper or unfair procedures, there was no consideration of information that ought not to have been considered, nor was there failure to consider information that ought properly to have been considered.



- The student appealed a decision of the Faculty denying a request to remove a course from the student's academic transcript. The Committee held that the Faculty's decision was free from improper or unfair procedures, there was no consideration of information that ought not to have been considered, nor was there a failure to consider information that ought properly to have been considered.

### **Matters of General Significance**

Under section 2.9 of the *Terms* the Committee shall draw Senate's attention to any other matters of general significance arising out of its work. In an appeal, the Committee heard that the respondent Faculty's rules permitted the appellant to spend a decade trying unsuccessfully to pass one year of a program. The Committee thought Faculties that do not have a rule governing students' lack of progress might wish to consider whether or not to impose a limit in such circumstances.

### **Future Changes to Rules or Practices**

Concerns were raised at the March 2019 meeting of the Senate related to the University's appellate committees, including this Committee, specifically around aspects of process; student membership education and orientation; diversity and inclusivity; and scheduling of hearings. The Senate Secretariat announced at the April meeting of Senate that it is taking steps to address concerns raised, initially through changes related to orientation and scheduling, with further discussion of changes relating to Committee composition and membership to occur over the coming months. Most of these concerns raise issues that are outside the scope of the limited powers of this Committee, but it would be pleased to do what it appropriately can to assist in response to these concerns, while preserving its independence and impartiality.

As Chair, I wish to thank members of the Committee for their willingness to serve on it so ably, support staff for their unfailing assistance and student members for their attendance and for raising issues of concern.

Respectfully submitted,

Prof. Anthony Sheppard, Chair  
Senate Committee on Appeals on Academic Standing

Members of the Committee:

Prof. Anthony Sheppard (Chair)  
Dr. Susan Forwell (Vice-Chair)  
Dr. Victoria Bungay  
Ms. Priscilla Chan (student)  
Mr. Benjamin Fischer  
Dr. Michael Isaacson  
Dr. William McKee  
Mr. Bill McNulty  
Dr. Santokh Singh  
Ms. Amber Shilling (student)  
Mr. Alex Starr (student)  
Chancellor (ex-officio) (voting)  
President (ex-officio) (voting)  
Registrar (ex-officio) (non-voting)



15 May 2019

From: Senate Awards Committee

To: Senate

Re: New Awards and Changes to Existing Awards

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The Senate Awards Committee recommends:

*“That Senate accept the awards as listed and forward them to the Board of Governors for approval, and that letters of thanks be sent to the donors.”*

## **NEW AWARDS – ENDOWED**

### **Hamad Ahmad Scholarship in Chemical Engineering**

Scholarships totalling \$1,200 have been made available through an endowment established by friends and family in memory of Hamad Ahmad (B.A.Sc. 2007) for undergraduate chemical engineering students who demonstrate academic excellence. The scholarships are made on the recommendation of the Department of Chemical and Biological Engineering. (First award available for the 2019/2020 winter session).

### **Beverly Ann Barnes Big Block Scholarship**

One or more scholarships, 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 an estate gift from Beverly Ann Barnes (1951-2016) for outstanding varsity athletes in any sport. Preference will be given to female athletes. Beverley Barnes (B.P.E. 1973, M.Ed. 1996) was an avid athlete, serving as a member of the Thunderbird women's basketball team from 1970 to 1974. In 1972, she made the Canadian women's national basketball team and competed at the 1976 Olympics in Montreal. The scholarships are made on the recommendation of the Athletics Award Committee. (First award available for the 2019/2020 winter session).

### **Dr. Rachmiel and Mrs. Luba Brandwajn Award in Electrical and Computer Engineering**

Awards totalling \$10,000 have been made available through an endowment established by Dr. Vladimir Brandwajn (Ph.D. 1977) and his wife, Claudia Greif (M.Sc. 1978), in honour of his parents, Dr. Rachmiel Brandwajn and Mrs. Luba Brandwajn for graduate students with outstanding academic achievement in the Department of Electrical and Computer Engineering. Dr. Rachmiel Brandwajn (1913-89) was a professor of French Literature at the University of

Warsaw and the Hebrew University of Jerusalem. He was able to finish high school due to a fortuitous act of charity from his school principal, who paid for his education. He later studied chemistry in France and received his doctorate in French literature from Gottingen University, Germany. Rachmiel wrote several critically acclaimed books. Luba Brandwajn (1910-98) received her MA in classical literature from the University of Warsaw, Poland. She and Rachmiel co-translated several French and Latin texts into Polish. The awards are made on the recommendation of the Department of Electrical and Computer Engineering, in consultation with the Faculty of Graduate and Postdoctoral Studies (First award available 2019/20 winter academic session).

### **Dave Brown Memorial Thunderbird Rugby Award**

One or more awards, 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 UBC Rugby Alumni in memory of UBC Rugby General Manager Dave Brown, for current or incoming UBC men's rugby student athletes who display exemplary leadership, strong character and dedication to the sport. This award recognizes Dave Brown's contributions to the sport of rugby nationally and provincially, and his work in supporting UBC Rugby in its goal of becoming the premier university rugby program in North America. The awards are made on the recommendation of the Athletics Award Committee. (First award available for the 2019/2020 winter session).

### **Lavinia M. Crane Memorial Bursary**

Bursaries totalling \$8,000 have been made available through an endowment established in memory of Lavinia M. Crane (1923-2017) by her nephews John, Denis, Les and Rodger Crane, along with matching funds from the University of British Columbia, for undergraduate students enrolled in the Bachelor of Science in Nursing program. Lavinia (B.Sc.N. 1951, M.P.H.) joined the Women's Royal Canadian Naval Service (WREN) in 1942 and worked at Special Operations stations that were part of the British Bletchley Park efforts to locate and record German naval vessel communications and decode the German Enigma ciphering system. After World War II, Lavinia earned her nursing degree and went to work for the BC Ministry of Health, first as a regional BC Public Health nurse and then in 1961 as a BC Public Health Nurse Consultant in Victoria. Lavinia was appointed Provincial Director of BC Public Health Nursing in 1975, a title she held until her retirement in 1985, upon which she received the President's Award from the Canadian Public Health Association. The bursaries are adjudicated by Enrolment Services. (First award available for the 2020/2021 winter session).

### **Maria Gabriele Finamore Award in Community Pharmacy**

Awards totalling \$1,400 have been made available through an endowment established by friends, family and colleagues in memory of Maria Gabriele Finamore (1954-2016) for students in the Entry-to-Practice Pharm.D. program who are in good academic standing and have an interest in

pursuing community pharmacy. Maria (B.Sc. Pharm. 1977) began her career in 1973 as a pharmacy assistant at London Drugs, where she continued to work for over 40 years. She was a long-time practice educator with the Faculty of Pharmaceutical Sciences and mentored students and new pharmacy graduates during her time at London Drugs. Maria served on a number of committees with the College of Pharmacists of British Columbia, including the College's Board of Examiners, of which she was the Chair. This award was established in recognition of Maria's commitment to lifelong learning and dedication to giving back to her community and her profession. The awards are made on the recommendation of the Faculty of Pharmaceutical Sciences. (First award available for the 2019/2020 winter academic session).

### **John Halliday McCrae Memorial Award in Urban Forestry**

Awards totalling \$4,000 have been made available through a bequest made to the White Rock and Surrey Naturalists Society by John "Jack" Halliday McCrae (1929-2014) for undergraduate students enrolled in the Bachelor of Urban Forestry program who have achieved good academic standing and demonstrated community involvement. Candidates must be Canadian citizens or permanent residents. Financial need may be considered. Preference will be given to 3rd or 4th year students. Jack was born in Bassano, Alberta, and was raised in New Westminster, British Columbia. He was a teacher, and taught for a number of years at North Delta High School, where he also served as a librarian. Jack and his wife Jean had a great interest in the environment and were avid hikers and birders. He was an active member of the White Rock and Surrey Naturalists Society, volunteering his time to promote conservation, stewardship and citizen-science. Each award will be valued ideally at not less than \$4,000. The awards are made on the recommendation of the Faculty of Forestry. (First award available for the 2019/2020 winter session).

### **Michael J. Korenberg Centennial Indigenous Scholars Award**

A \$14,000 renewable entrance award has been made available through an endowment established by Michael J. Korenberg, along with matching funds from the University of British Columbia, for First Nations, Inuit or Métis undergraduate students who are residents of British Columbia entering university directly from secondary school or transferring from another post-secondary institution to an undergraduate program of study. Recipients are academically qualified and would not be able to attend UBC without financial assistance. Preference will be given to students entering a program in the Faculty of Applied Science. 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 is the shorter period). The awards are made on the recommendation of the Centennial Scholars Entrance Award Committee. (First award available for the 2019/2020 winter session).

**Dr. Tsung-yi Lin Exchange Award**

Awards totalling \$1,850 have been made available through an endowment established by the Taiwanese Canadian Cultural Society for undergraduate or graduate students going on exchange to Taiwan and who demonstrate an interest in health sciences. The awards are made on the recommendation of Go Global. (First award available in the 2019/2020 winter session.)

**Dennis and Daphne Martin Graduate Bursary in Arts**

Bursaries totaling \$4,800 have been made available through an endowment established by Daphne Martin, along with matching funds from the University of British Columbia and the Faculty of Arts, for graduate students in the Faculty of Arts. Dennis Martin studied Geological Engineering at UBC (B.A.Sc. 1973) and went on to receive his M.Sc. (1978) and Ph.D. (1993) from Imperial College in London, England. He became internationally renowned as a consultant engineer, particularly for his work in slope stability, and was a major supporter of UBC's Geological Engineering program as a teacher and mentor. His wife, Daphne, received a B.A. (Econ.) from UBC in 1972. The bursaries are adjudicated by Enrolment Services. (First award available for the 2019/2020 winter session.)

**Rose Hinselwood McCaffrey Indigenous Education Bursary**

Bursaries totalling \$4,000 have been made available through an endowment established by Dr. Colin McCaffrey (M.Ed. 1963) in memory of his mother, Rose Hinselwood McCaffrey, for students enrolled in the NITEP Indigenous Education program in the Faculty of Education. Born in Liverpool, England, Rose McCaffrey loved school but was forced to leave at age 12 to work in Crawford's Biscuit Factory. During World War I, Rose produced shells for the British Army and enlisted in the Royal Women's Army Corp. Rose believed in the importance of education and encouraged her children to pursue higher education, which was never available to her. Dr. Colin McCaffrey credits his mother as a driving factor in attaining his Ph.D. in Education. The bursaries are adjudicated by Enrolment Services. (First award available for the 2019/2020 winter session).

**Ellen Neel and Beau Dick Award in Art History, Visual Art and Theory**

Awards totalling \$2,000 have been made available through an endowment established by the Audain Foundation, the Faculty of Arts, friends and family in memory of Ellen Neel and Beau Dick, for Indigenous students enrolled in a major, minor or graduate program in the Department of Art History, Visual Art and Theory (AHVA) who are in good academic standing. Ellen Neel (1916–1966) was a Kwakwaka'wakw artist and the first woman recognized for carving poles on the Northwest Coast. In 1948 Neel presented the *Victory Through Honour* pole to the UBC Alma Mater Society in front of a crowd of six thousand people. Chief Beau Dick, Walas Gwy Um (1955–2017) was an expert carver and knowledge keeper of Kwakwaka'wakw ceremonial tradition who activated ceremony as a way to engage contemporary politics. He was AHVA Artist in Residence from 2013-2017. Neel and Dick were known for their powerful advocacy on

behalf of their communities. The awards are made on the recommendation of the Department of Art History, Visual Art, and Theory, and in the case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter academic session).

### **Delroy L. Paulhus Scholarship in Psychology**

Scholarships totalling \$1,200 have been made available through an endowment established by Professor Delroy L. Paulhus for outstanding Ph.D. students in the Department of Psychology who have achieved candidacy. Professor Paulhus earned his doctorate from Columbia University in 1980 and joined the UBC Department of Psychology in 1982. His research interests include dark personalities, over-claiming and questionnaire response styles. In 2007, he received a Killam Faculty Research Prize. The scholarships are made on the recommendation of the Department of Psychology, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter session).

### **Greg Quan Prize in Music Education**

Prizes totalling \$2,080 have been made available through an endowment established in honour of Gregory M. Quan (B.Ed. 1998, M.Ed. 2004) for outstanding Music Education students in the Bachelor of Education program who are passionate about inspiring and sharing a love of music. Preference will be given to students whose strength is in choral music. Greg Quan teaches high school music, serving as Artistic Director of Choirs and Orchestras at Magee Secondary School in Vancouver. His work to foster mindfulness in his students is recognized by the Dalai Lama Center for Peace and Education. Central in his philosophy of music education is what he calls the “Choir Family”, where students sing in a safe and nurturing environment and develop close relationships based on trust and support of one another. In 2015 he was recognized as one of the top 100 graduates from the UBC Faculty of Education and in 2019 he was designated a UBC Faculty of Education distinguished alumni. This prize recognizes Greg’s dedication to inspire students through music education. The awards are made on the recommendation of the Faculty of Education. (First award available for the 2019/2020 winter session).

### **David B. Thomas Memorial Bursary in Law**

Bursaries totalling \$1,200 have been made available through an endowment established by friends, family and colleagues in memory of David Brian Thomas for J.D. students in the Peter A. Allard School of Law. Preference will be given to students enrolled in an upper-level Criminal Law course. David (B.A. 2007, J.D. 2011) was called to the BC Bar in 2012. He practiced criminal defence in Vancouver before joining the Provincial Crown in Surrey in 2016. In addition to his work as a lawyer, David was a coach for the Peter Burns Mock Trial Competition and supervised 3rd-year law students for the Criminal Clinic at the Peter A. Allard School of Law. The bursaries are adjudicated by Enrolment Services. (First award available for the 2019/2020 winter session).

**Yip So Man Wat Graduate Scholarship in Arts**

Scholarships totalling \$8,000 have been made available through an endowment established by Mr. Chi Shum Watt in honour of his mother, Yip So Man Wat, for students in the Faculty of Arts who are in their fifth year of the their Ph.D. program or later. Each scholarship will be valued ideally at not less than \$4,000. The scholarships are made on the recommendation of the Faculty of Arts, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter session).

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**NEW AWARDS – ANNUAL****Amazon Go Fellowship in Computer Science**

Two fellowships of \$26,000 each are offered annually by Amazon Go for Ph.D. students in the area of Computer Vision in the Department of Computer Science. Awardees are also eligible for reimbursement of the cost of attending conferences and related travel and/or research-related travel expenses up to a maximum of an additional \$4,000 over two years. Conditional on the recipient's continued satisfactory academic progress, the fellowship may be renewed for an additional year of study. The fellowships are made on the recommendation of the Department of Computer Science, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter session).

**Architectural Institute of British Columbia Bursary**

Bursaries totalling \$5,000 are offered annually by the Architectural Institute of British Columbia (AIBC) for students in the Master of Architecture or Bachelor of Design in Architecture, Landscape Architecture and Urbanism programs. Preference will be given to First Nations, Inuit or Métis students of Canada. The AIBC provides a range of regulatory and outreach programs to the public and its members, including the Student Affiliate program which supports the next generation of architects. The bursaries are adjudicated by Enrolment Services. (First award available for the 2019/2020 winter session).

**Architectural Institute of British Columbia Centenary Bursary**

A \$2,100 bursary is offered annually by the Architectural Institute of British Columbia (AIBC) for students in the Master of Architecture or Bachelor of Design in Architecture, Landscape Architecture and Urbanism programs. This bursary was established in recognition of AIBC's centenary year in 2020. The AIBC provides a range of regulatory and outreach programs to the public and its members, including the Student Affiliate program which supports the next generation of architects. The bursary is adjudicated by Enrolment Services. (First award available for the 2019/2020 winter session).

**Architectural Institute of British Columbia Entrance Scholarship**

A \$2,500 entrance scholarship is offered annually by the Architectural Institute of British Columbia (AIBC) for students entering the Master of Architecture or Bachelor of Design in Architecture, Landscape Architecture and Urbanism programs in the School of Architecture and Landscape Architecture. Candidates must be Canadian citizens or permanent residents.

Preference will be given to First Nations, Inuit, or Métis students of Canada. The AIBC provides a range of regulatory and outreach programs to the public and its members, including the Student Affiliate program which supports the next generation of architects. The scholarship is made on the recommendation of the School of Architecture and Landscape Architecture, and in the case of a graduate student, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter session).

**ConeTec Women in Geotechnical Engineering Award**

Two \$2,500 awards are offered annually by the ConeTec Education Foundation and the Woeller Family Foundation for second and third-year female Bachelor of Applied Science students in Civil Engineering, Geological Engineering, or Mining Engineering who have demonstrated leadership and an interest in pursuing geotechnical field work and field research. ConeTec Investigations was founded in 1985 by Mining Engineering alumnus David Woeller (M.Eng. 1986). Headquartered in Richmond, B.C. and with offices throughout North and South America, the company provides full-service geotechnical and geoenvironmental site investigation for the infrastructure, mining, energy, environmental and construction industries. The awards are made on the recommendation of the Faculty of Applied Science. (First award available for the 2019/2020 winter session).

**Dentons Entrance Award in Law**

A \$15,000 entrance award is offered annually by Dentons Canada LLP for a student entering the J.D. program who has achieved academic excellence. Preference will be given to a student who has demonstrated an innovative approach to problem solving through previous work experience or community involvement. The award is made on the recommendation of the Peter A. Allard School of Law. (First award available for the 2019/2020 winter session).

**Dr. Mohinder Singh Dhillon Prize in Punjabi Studies**

A \$2,000 prize is offered annually in honour of Dr. Mohinder Singh Dhillon for an outstanding undergraduate or graduate student taking classes in Punjabi Studies in the Department of Asian Studies. Dr. Dhillon came to Canada in 1967, and while working and raising three children into professional careers with his wife Jasmer, he devoted his time, energy, knowledge, and talent to more than thirty community organizations, including service as an advisory board member for the Canadian Museum for Human Rights and for the University of Winnipeg's Global College. In 2008, Dr. Dhillon received an Honorary Doctorate from the University of Winnipeg. The

prize is made on the recommendation of the Department of Asian Studies. (First award available for the 2019/2020 winter session).

**Faculty Women's Club Childcare Bursary**

A bursary of \$2,000 is offered annually by the Faculty Women's Club for undergraduate and graduate students with children in licensed childcare. Preference will be given to students who are single parents and families new to BC, not yet qualified for the BC childcare tax benefit. The bursaries are adjudicated by Enrolment Services. (First award available for the 2019/2020 winter session).

**Graduate Fellowship in Gambling Research**

Two \$32,000 fellowships are offered annually by the BC Lottery Corporation for outstanding graduate students in the Faculty of Arts whose research area is related to gambling. The fellowships are made on the recommendation of the Faculty of Arts, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter session).

**International Pipeline Conference Foundation Award in Pipeline Engineering**

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. (First award available for the 2019/2020 winter session).

**Kukri Sports Women's' Thunderbird Rugby Award**

An award of \$2,000 is offered annually by Kukri Sports and the UBC Rugby Program for an outstanding member of the Thunderbirds Women's Rugby Team in any year of study. The award is made on the recommendation of the Head Coach with review and approval by the Athletics Awards Committee. (First award available for the 2019/2020 winter session.)

**RBC Graduate Entrance Scholarship for Women in Finance**

A \$25,000 entrance scholarship is offered annually by the Royal Bank of Canada for an outstanding female graduate student in the Finance General Stream of the M.Sc. in Business Administration program in the UBC Sauder School of Business. Conditional on the recipient's continued satisfactory academic progress, the scholarship may be renewed for an additional year of study. Only one student can hold this award in any given year. The scholarship is made on the recommendation of the UBC Sauder School of Business in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2019/2020 winter session).



**Takao Tanabe and Anona Thorne Scholarship in Visual Arts**

A \$2,500 scholarship is offered annually by Takao Tanabe C.M., O.B.C., and Anona Thorne (B.A. 1991, M.Sc. 1993) for an outstanding Bachelor of Fine Arts student majoring in Visual Art who has completed a 300-level intermediate painting course. Takao Tanabe is one of Canada's most influential painters, receiving the Audain Prize for Lifetime Achievement in Visual Arts in 2013. This scholarship honours Takao and Anona's commitment to fostering the next generation of artistic talent. The scholarship is made on the recommendation of the Department of Art History, Visual Art and Theory. (First award available for the 2019/2020 winter session).

**VanHacks Award in Computer Science**

A \$1,000 award is offered annually by VanHacks Hackathon for a second-year Bachelor of Science student with a major or combined major in Computer Science and with outstanding academic achievement and demonstrated community service and volunteerism. VanHacks Hackathon, organized by TTT Studios and Vancouver Startup Week, is an annual hackathon where participants create tech solutions for local non-profits. This academic award is made on the recommendation of the Department of Computer Science. (First award available for the 2019/2020 winter session).

**Michael Williams Thunderbird Cycling Award**

Awards totalling \$2,000 are offered annually by Harrison and Elissa Mak for student athletes on the Thunderbirds Sport Club cycling team who demonstrate skill, leadership and commitment to the sport. The awards are made on the recommendation of the Thunderbirds Sport Clubs Awards Committee. (First award available for the 2018/2019 winter session).

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**PREVIOUSLY APPROVED AWARDS WITH CHANGES IN TERMS OR FUNDING SOURCE****Endowed Awards****8543 – Faculty Women's Club 100 Year Legacy Graduate Scholarship****Rationale for Proposed Changes**

Since its establishment in 2016, this endowment has received a few large gifts which have contributed to an increased spend amount. The Faculty Women's Club would like to increase the number of awards available to benefit more students.

**Current Award Description**

A \$7,100 award is available through an endowment established by the Faculty Women's Club in commemoration of their 100th anniversary as a service organization at UBC (1917- 2017). The scholarship is designated to support a female Canadian citizen pursuing graduate studies in a health-related field which could have a significant impact on the future well-being of society. The recipient will be in their second or subsequent year of graduate study, with demonstrated academic and leadership qualities; financial need may also be considered. Preference will be given to a student in Audiology & Speech Sciences, Epidemiology (School of Population & Public Health), Microbiology & Immunology, Occupational Therapy, Physical Therapy, or Rehabilitation Sciences. Recommendations are made by the Office of the Vice-Provost Health, in consultation with the Faculty of Graduate and Postdoctoral Studies.

### **Proposed Award Description**

Awards totalling \$7,100 are available through an endowment established by the Faculty Women's Club in commemoration of their 100th anniversary as a service organization at UBC (1917- 2017). The scholarships are designated to support female Canadian citizens pursuing graduate studies in a health-related field which could have a significant impact on the future well-being of society. The recipients will be in their second or subsequent year of graduate study, with demonstrated academic and leadership qualities; financial need may also be considered. Preference will be given to students in Audiology & Speech Sciences, Epidemiology (School of Population & Public Health), Microbiology & Immunology, Occupational Therapy, Physical Therapy, or Rehabilitation Sciences. Recommendations are made by the Office of the Vice-Provost Health, in consultation with the Faculty of Graduate and Postdoctoral Studies.

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## **2012 – Greg and Susana Quan Music Educator Award**

### **Rationale for Proposed Changes**

In 2014, the donor Pat Quan made a gift of \$30,000 to establish the “Greg and Susana Quan Endowment Fund” in accordance with the terms of the Fund’s Endowment Trust Agreement. The Donor has requested that the University approve a name change for the Fund to recognize the family name rather than individual members of the family. The name change was approved at the April 18 Board of Governors’ Meeting.

### **Current Award Description**

An award of \$1,000 has been made available through an endowment established in honour of Greg and Susana Quan who both earned their Masters of Education degrees from UBC while continuing to inspire and share their passion for learning with their students. The award recognizes a student in the Bachelor of Education program who has demonstrated a passion and extraordinary capability for music education with youth in a group environment. Candidates will have volunteer or extracurricular involvement in music education that includes band, choral,

orchestra or jazz ensembles at the secondary level. Preference will be given to candidates who possess the capacity for multiple musical fields. The award is made on the recommendation of the Faculty of Education.

**Proposed Award Name: ~~Greg and Susana Quan~~ Family Music Educator Award**

**Proposed Award Description**

An award of **Awards totalling** \$1,200 ~~has~~ **have** been made available through an endowment established **by the Quan Family** ~~in honour of Greg and Susana Quan who both earned their Masters of Education degrees from UBC while continuing to inspire and share their passion for learning with their students. The award recognizes a~~ **for** students in the Bachelor of Education program who ~~has~~ **have** demonstrated a passion and extraordinary capability for music education with youth in a group environment. Candidates will have volunteer or extracurricular involvement in music education that includes band, choral, orchestra or jazz ensembles at the secondary level. Preference will be given to candidates who possess the capacity for multiple musical fields. The awards ~~s are~~ is made on the recommendation of the Faculty of Education.

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**4371 – Agnes and Gilbert Hooley Scholarship in Chemistry**

**Rationale for Proposed Changes**

This endowment was established in 1988 and originally had a spend of \$900 in awards. Since then, the endowment has grown to \$1.5M and generates \$64,000 in spending. Currently, the Department of Chemistry is unable to completely assign the yearly spend amount due to an award description that limits the number of awards that can be given out by academic year. After reviewing the terms of the endowment with University Counsel and consulting with the Department of Chemistry, we have drafted an award description that meets the requirements of the endowment without restricting the number of awards that can be assigned, enabling the spend to be fully assigned each year.

**Current Award Description**

J. Gilbert Hooley (1914-1987), UBC B.A. (1934) and M.A. (1936) and MIT Ph.D. (1939), joined the UBC Chemistry Department (1942-1979) after three years with Corning Glass Works. The data he produced on the atomic weight of rubidium is considered a classic piece of research, and he also carried out pioneering research in the areas of specific heat measurements and staging in graphite compounds. In 1979 he received the prestigious Charles E. Pettinos Award. Dr. Hooley married Agnes Schroeder, UBC B.A. (Hons), M.A., A.T.C.M and L.R.S.M, in 1939. Mrs. Hooley taught chemistry at UBC from 1944 to 1956. The Hooleys had a life-long involvement with music, literature and the arts plus a serious concern about broader social issues. In

recognition of their contributions to UBC, scholarships valued up to the cost of one year's tuition have been endowed by their colleagues and friends for: two third-year chemistry students; two fourth-year chemistry students; and two graduate chemistry students. Preference is given to students with awareness of the social role of science. Awards are made on the recommendation of the Hooley Fund Committee within the Department of Chemistry, and in the case of graduate students, in consultation with the Faculty of Graduate Studies.

### **Proposed Award Description**

Scholarships totalling \$63,000 have been made available through an endowment established by friends and colleagues in honour of Agnes and J. Gilbert Hooley for outstanding students in the Department of Chemistry. The number of scholarships should be split equally between third year undergraduate students, fourth year undergraduate students, and graduate students. Each award should not exceed the value of tuition. Preference will be given to students with an awareness of the social role of science. J. Gilbert Hooley (1914–1987), UBC (B.A. (1934), and M.A. (1936), and MIT Ph.D. (1939), joined the UBC Department of Chemistry Department (1942–1979) in 1942 after three years with Corning Glass Works. The data he produced on He carried out pioneering research into the atomic weight of rubidium is considered a classic piece of research, and he also carried out pioneering research in and the areas of specific heat measurements and staging in graphite compounds. In 1979 he received the prestigious Charles E. Pettinos Award. Dr. Hooley married Agnes Schroeder, UBC (B.A. (Hons) 1938, M.A. 1970, A.T.C.M., and L.R.S.M.), in 1939. Mrs. Hooley taught chemistry at UBC from 1944 to 1956. The Hooleys had a life-long involvement with music, literature and interest in the arts, as well as a plus a serious concern for about broader social issues. In recognition of their contributions to UBC, scholarships valued up to the cost of one year's tuition have been endowed by their colleagues and friends for: two third-year chemistry students; two fourth-year chemistry students; and two graduate chemistry students. Preference is given to students with awareness of the social role of science. Awards The scholarships are made on the recommendation of the Hooley Fund Committee within the Department of Chemistry, and in the case of a graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies.

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## **3286 – Thomas L. Perry Memorial Prize in Medical Pharmacology & Therapeutics**

### **Rationale for Proposed Changes**

The description refers to a course that no longer exists. As discussed with University Counsel this amendment to the award description is within the stated purpose of the endowment which is to support prizes for students in pharmacology and therapeutics. The Department of Anesthesiology, Pharmacology & Therapeutics has approved the revised description.

**Current Award Description**

A prize of \$700 has been endowed by the friends and colleagues of the late Dr. Thomas L. Perry, Sr. of the Department of Pharmacology & Therapeutics. The prize is awarded to the student demonstrating the best overall performance for the written case assignments in Phase VI Therapeutics and is made on the recommendation of the awards committee of the Department of Pharmacology & Therapeutics.

**Proposed Award Description**

A Prizes totalling of \$700 has been endowed have been made available through an endowment established by the friends and colleagues of the late Dr. Thomas L. Perry, Sr. of the Department of Pharmacology & Therapeutics for M.D. students who have excelled in Therapeutics. The prizes are is awarded to the student demonstrating the best overall performance for the written case assignments in Phase VI Therapeutics and is made on the recommendation of the awards committee of the Department of Anesthesiology, Pharmacology & Therapeutics.

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**653 – Dianna Popowich Memorial Scholarship****Rationale for Proposed Changes**

As approved by the Director of Athletics Performance & Team Services who oversees Athletics Awards and agreed by University Counsel, we are requesting that the number of awards that the Dianna Popowich Memorial Scholarship gives out is increased. This endowment was established in 1987 and the original award description approved by Senate referred to one \$1,000 scholarship. Since that time the endowment has grown to \$100,000 and has an approximate spend rate of \$4,000. The selection committee and the donor contact have requested that the award description be updated to allow for multiple awards to be assigned. In keeping with the original spirit of the award, individual scholarships would not be lower than \$1,000.

**Current Award Description**

A scholarship of \$4,300 has been endowed by the family, friends and teammates of Dianna Popowich (B.A. 1985) in recognition of her outstanding human qualities. A member and captain of the Thunderbird Field Hockey Team (1980-1985), Dianna showed a genuine concern for and willingness to help others, manifested courage in adversity, and never lost sight of the human aspect in sport and life. The scholarship is awarded to a female athlete who has completed at least one year of study and demonstrated a sincere commitment to athletics at UBC. In exceptional circumstances, the award may be shared. Preference is given to candidates whose athletic contribution is in the sport of field hockey. The award is made on the recommendation of a selection committee chaired by the Director of Women's Athletics. In the case of a graduate student, the recommendation is made in consultation with the Faculty of Graduate Studies.

**Proposed Award Description**

A scholarship of Scholarships totalling \$4,300 has have been made available through an endowment established by the family, friends and teammates of Dianna Popowich (B.A. 1985) for female athletes who has have completed at least one year of study and demonstrated a sincere commitment to athletics at UBC with preference is given to candidates whose athletic contribution is in the sport of field hockey. in recognition of her outstanding human qualities. A member and captain of the Thunderbird Field Hockey Team (1980-1985), Dianna is recognized of for her outstanding human qualities such as showed a genuine concern for and willingness to help others and manifested courage when faced with in adversity. and She never lost sight of the human aspect in sport and life. The scholarship is awarded to a female athlete who has completed at least one year of study and demonstrated a sincere commitment to athletics at UBC. In exceptional circumstances, the award may be shared. Preference is given to candidates whose athletic contribution is in the sport of field hockey. Each scholarship should be a minimum of \$1,000. The award is made on the recommendation of a selection committee chaired by the Director of Women's Athletics. In the case of a graduate student, the recommendation is made in consultation with the Faculty of Graduate Studies.

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**3795 – Calvin Sawyer Memorial Scholarship in Pharmaceutical Sciences****Rationale for Proposed Changes**

The donor has made an additional gift to endow this award which was previously funded annually. This award was created in honour of their deceased son Calvin and biographic information has been added to personalize the award.

**Current Award Description**

Scholarships totalling \$2,500 are offered by Sharon McKenzie (BSN) and Lap Wu (BSc. (Pharm)) and their family in memory of their son, Calvin Sawyer. The scholarships are awarded on the recommendation of the Faculty of Pharmaceutical Sciences to students entering the second year of the undergraduate program.

**Proposed Award Description**

Scholarships totalling \$1,200 have been made available through an endowment established by Sharon McKenzie-Wu (B.S.N.) and Lap Wu (B.Sc. (Pharm.) 1980) and their family in memory of their son, Calvin Sawyer, for undergraduate students entering second year of the Entry-to-Practice Pharm.D. program. Calvin passed away at the age of 29 in early 2012. He will be remembered by his friends and family for his strong work ethic and kind heart. He was a gifted artist who began designing video games at a young age, had a lifelong passion for sports, and dreamed of owning and operating his own business when he completed school. The scholarships

are made on the recommendation of the Faculty of Pharmaceutical Sciences to students entering the second year of the undergraduate program.

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## **8543 – Suzanne Lee Teachers' Education Bursary**

### **Rationale for Proposed Changes**

This annual award was previously funded by an endowment held at the Minerva Foundation. The donor contact has requested that the endowment be transferred to UBC. The award description has been revised to reflect the change in funding source. The preference language, which is based on the terms of the endowment in a Schedule A, has been revised to more closely align with the donor's original intent.

### **Current Award Description**

A bursary of \$1000 is offered through a partnership between the Minerva Foundation for BC Women and UBC's Faculty of Education to a female student studying education. The Minerva Foundation is a BC organization that assists women and promotes the development of women leaders through education. Preference will be given to a student who is a single parent, is aboriginal, is a mature student or has immigrated to Canada in the past four years. Students must have demonstrated financial need. The awards are made on the recommendation of Enrolment Services.

### **Proposed Award Description**

Bursaries totalling \$4,000 have been made available through an endowment established in memory of Suzanne Lee (1918-2012). A bursary of \$1000 is offered through a partnership between the Minerva Foundation for BC Women and UBC's Faculty of Education to a female student in the Faculty of Education studying education. The Minerva Foundation is a BC organization that assists women and promotes the development of women leaders through education. Preference will be given to a student meeting at least one of the following criteria: who is (1) a single parent, is aboriginal, is a mature student or (2) has immigrated to Canada in the past four years, (3) is a mature student, (4) is enrolled in a graduate program, (5) has a disability or (6) is Indigenous. Students must have demonstrated financial need. Suzanne dreamed of being a teacher, but the education of her brothers was prioritized over her own. Without the benefit of post-secondary education, Suzanne struggled to provide for her two children after being widowed. This bursary was established to help women in similar circumstances to Suzanne pursue higher education. The awards bursaries are made on the recommendation of adjudicated by Enrolment Services.

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## 1396 – Sanderson Family Service Award in Arts

### Rationale for Proposed Changes

The donor has given a gift to endow the award. The description has been revised to reflect the change in funding source.

### Current Award Description

A \$1,000 service award is offered by UBC alumnus Aaron Sanderson (BA '09, MA '12, FAHP) for a student in the Faculty of Arts of the UBC Point Grey Campus who demonstrates academic achievement, leadership and service to create a better community. Recommendations are made by the Faculty of Arts.

### Proposed Award Description

Awards totalling \$1,000 service award have been made available through an endowment established is offered by UBC alumnus Aaron Sanderson (B.A. '2009, M.A. '12, F.A.H.P.) for a students in the Faculty of Arts of the UBC Vancouver Campus who demonstrates academic achievement, leadership and service to create a better community. The awards are made on the Recommendations are made by of the Faculty of Arts.

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## Annual Awards

## 901 – Architectural Institute of British Columbia Medal

### Rationale for Proposed Changes

This award was previously non-monetary and awardees received a medal. The donor would like to revise the award to include a monetary component.

### Current Award Description

A medal is awarded to an outstanding student in the graduating class who has demonstrated excellence in academic work as well as in design and who holds the promise of making a contribution to the profession of Architecture.

### Proposed Name: Architectural Institute of British Columbia Medal Prize

### Proposed Award Description

A \$2,000 prize and accompanying medal is are offered annually awarded by the Architectural Institute of British Columbia to an outstanding graduating Master of Architecture student in the graduating class who has demonstrated academic excellence in academic work as well as in



design and who holds the promise of making a contribution to the profession of Architecture. Candidates must be Canadian citizens or permanent residents. Preference will be given to members of the Architectural Institute of British Columbia. The AIBC provides a range of regulatory and outreach programs to the public and its members, including the Student Affiliate program which supports the next generation of architects. The prize is made on the recommendation of the School of Architecture and Landscape Architecture.

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## **924 – Architectural Institute of British Columbia Scholarship**

### **Rationale for Proposed Changes**

Donor would like to increase the award values that are given out annually.

### **Current Award Description**

Scholarships totalling \$6,500 are made to students who have high overall academic standing and who have demonstrated significant progress and development in design. A scholarship of \$1,500 is awarded to a student in first year with the highest average after one term in the School of Architecture and Landscape Architecture. A scholarship of \$1,500 is awarded to a student entering the final year. The remaining \$3,500 is awarded to students in any year, the minimum amount being \$500. The awards are made on the recommendation of the School in consultation with the Faculty of Graduate and Postdoctoral Studies.

### **Proposed Award Description**

Scholarships totalling ~~\$6,500~~ \$15,000 are offered annually by the Architectural Institute of British Columbia (AIBC) made to for students enrolled in the Master of Architecture or Bachelor of Design in Architecture, Landscape Architecture and Urbanism programs in the School of Architecture and Landscape Architecture ~~who have high overall academic standing and~~ who have demonstrated significant progress and development in design. A scholarship of ~~\$1,500~~ \$3,500 is awarded to a student in first year with the highest average after one term in the School of Architecture and Landscape Architecture. A scholarship of ~~\$1,500~~ \$3,500 is awarded to a student entering their final year of studies. The remaining ~~\$3,500~~ \$8,000 is awarded to students in any year, the minimum amount being ~~\$500~~ \$2,000. Candidates must be Canadian citizens or permanent residents. Preference will be given to members of the Architectural Institute of British Columbia. The AIBC provides a range of regulatory and outreach programs to the public and its members, including the Student Affiliate program which supports the next generation of architects. The awards are made on the recommendation of the School of Architecture and Landscape Architecture, and in the case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies.

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## 5378 – ConeTec Geotechnical Award in Engineering

### Rationale for Proposed Changes

The award description has been revised to remove administrative information from the description and to mirror the description of the ConeTec Women in Geotechnical Engineering Award.

**Current Name:** ConeTec Geotechnical Award in Engineering

### Current Award Description

Three service awards of \$2,500 each are offered by the ConeTec Education Foundation to undergraduate students in second or third year who have demonstrated leadership, curiosity and independent thinking and who have indicated a desire and suitability to pursue field work and field research. Applicants from Civil Engineering, Geotechnical, Geological and Mining Engineering will be selected annually. Recipients may also be invited to apply for paid summer internship experience for a period of 12 - 16 weeks at one of ConeTec's North American field operations. The awards are made on the recommendation of faculty within the departments of Civil, Geotechnical Geological and Mining Engineering in the Faculty of Applied Science.

**Proposed Name:** ConeTec Geotechnical Award in Engineering Award

### Proposed Award Description

Three service awards of **Two** \$2,500 **awards** each are offered **annually** by the ConeTec Education Foundation **and the Woeller Family Foundation** to undergraduate students in **for** second **or** **and** third year **Bachelor of Applied Science students in Civil Engineering, Geological Engineering, or Mining Engineering** who have demonstrated leadership, curiosity and independent thinking and who have indicated a desire and suitability to **and an interest in** pursuing **geotechnical** field work and field research. ~~Applicants from Civil Engineering, Geotechnical, Geological and Mining Engineering will be selected annually. Recipients may also be invited to apply for paid summer internship experience for a period of 12 – 16 weeks at one of ConeTec's North American field operations.~~ **ConeTec Investigations was founded in 1985 by Mining Engineering alumnus David Woeller (M.Eng. 1986). Headquartered in Richmond, B.C. and with offices throughout North and South America, the company provides full-service geotechnical and geoenvironmental site investigation for the infrastructure, mining, energy, environmental and construction industries.** The awards are made on the recommendation of faculty within the departments of Civil, Geotechnical Geological and Mining Engineering in the Faculty of Applied Science.

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## 8617 – Dr. Mohinder Singh Dhillon Bursary

### Rationale for Proposed Changes

This bursary has been unassigned since its establishment in 2016 due to difficulty determining students involved in the Punjabi Community. The criteria have been clarified to identify a candidate pool that Enrolment Services can adjudicate.

### Current Award Description

A \$1,400 bursary is offered annually in honour of Dr. Mohinder Singh Dhillon. Dr. Dhillon came to Canada in 1967, and while working and with his wife Jasmer raising three children into professional careers, he devoted his time, energy, knowledge, and talent to more than thirty community organizations, including service as an advisory board member for the Canadian Museum for Human Rights and for The University of Winnipeg's Global College. In 2008, Dr. Dhillon received an Honorary Doctorate from the University of Winnipeg. The bursary is available to undergraduate students involved in the Punjabi Community and studying in the Faculty of Arts. The award is adjudicated by Enrolment Services.

### Proposed Award Description

~~A \$1400 bursary~~ Bursaries totalling \$2,000 is are offered annually in honour of Dr. Mohinder Singh Dhillon for undergraduate students in the Faculty of Arts enrolled in a Punjabi literature, language, or culture course. Dr. Dhillon came to Canada in 1967, and while working and raising three children into professional careers with his wife Jasmer raising three children into professional careers, he devoted his time, energy, knowledge, and talent to more than thirty community organizations, including service as an advisory board member for the Canadian Museum for Human Rights and for The University of Winnipeg's Global College. In 2008, Dr. Dhillon received an Honorary Doctorate from the University of Winnipeg. ~~The bursary is available to undergraduate students involved in the Punjabi Community and studying in the Faculty of Arts.~~ The award is bursaries are adjudicated by Enrolment Services.

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## 8667 – Master of Health Administration Bursary

### Rationale for Proposed Changes

Due to the part-time nature of the Masters Health Administration Program students are not able to qualify for student loans; therefore, Enrolment Services is unable to determine the students unmet financial need through the bursary application. Based on this we are revising this burary to be an award.

### Current Award Description

Bursaries are offered annually by the School of Population and Public Health to graduate students in the Master of Health Administration program who demonstrate unmet financial need.

Funding is determined annually based on enrolment in the program. The bursaries are adjudicated by Enrolment Services.

**Proposed Title: Master of Health Administration Bursary Award**

**Proposed Award Description**

Bursaries Awards are offered annually by the School of Population and Public Health to graduate students in the Master of Health Administration program. Preference for students who demonstrate ~~unmet~~ financial need. Funding is determined annually based on enrolment in the program. The bursaries are adjudicated by Enrolment Services awards are made on the recommendation of the School of Population and Public Health.

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**8658 – Student Housing Assistance Grant**

**Rationale for Proposed Changes**

As the cost of UBC Housing/meal plans increases each year, Enrolment Services would like to have the flexibility to determine the grant amount and the number of grants given out each year. The overall budget of the grant will remain the same at \$200,000 for the academic year.

**Current Award Description**

The UBC Vancouver Student Housing Assistance Grant assists students beginning their first year of study at UBC Vancouver, whether they are coming from high school or transferring from another post-secondary institution. The purpose of this program is to financially support academically qualified students who show a keen interest in joining and contributing to the UBC community, but who would not be able to attend without significant financial assistance. The program will offer twenty (20) one-time grants of up to \$10,000 to help cover the cost of the student's first year housing and/or meal plan.

**Proposed Award Description**

The UBC Vancouver Student Housing Assistance Grant assists students beginning their first year of study at UBC Vancouver, whether they are coming from high school or transferring from another post-secondary institution. The purpose of this program is to financially support academically qualified students who show a keen interest in joining and contributing to the UBC community, but who would not be able to attend without significant financial assistance. The program will offer ~~twenty (20) one-time grants of up to \$10,000~~ to help cover the cost of ~~the~~ student's first year ~~student~~ housing and/or meal plans offered through SHHS.

15 May 2019

To: Vancouver Senate

From: Senate Curriculum and Admissions Committees

Re: Master of Engineering Leadership in Sustainable Process Engineering; Master of Business Administration; Doctor of Philosophy in School and Applied Child Psychology; Master of Arts in School and Applied Child Psychology; Master of Education in School and Applied Child Psychology; Master of Arts (approval)

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The Senate Curriculum and Admissions Committees have reviewed the material forwarded to them by the Faculty of Graduate and Postdoctoral Studies (Applied Science, Commerce and Business Administration, Education, and Science) and enclose those proposals they deem ready for approval.

The following is recommended to Senate:

**Motion:** *“That the revised Master of Engineering Leadership in Sustainable Process Engineering, the Master of Business Administration, the Doctor of Philosophy in School and Applied Child Psychology, the Master of Arts in School and Applied Child Psychology, the Master of Education in School and Applied Child Psychology degree programs, and the discontinuation of the Master of Arts program be approved.”*

Respectfully submitted,

Dr. Peter Marshall, Chair, Senate Curriculum Committee  
Dr. Carol Jaeger, Chair, Senate Admissions Committee



## FACULTY OF APPLIED SCIENCE

### *Revised program*

Master of Engineering Leadership in Sustainable Process Engineering

## FACULTY OF COMMERCE AND BUSINESS ADMINISTRATION

### *Revised program*

Master of Business Administration

## FACULTY OF EDUCATION

### *Revised programs*

Doctor of Philosophy in School and Applied Child Psychology

Master of Arts in School and Applied Child Psychology

Master of Education in School and Applied Child Psychology

## FACULTY OF SCIENCE

### *Discontinuation of program*

Master of Arts



## UBC Admission Proposal Form

<p><b>Faculty:</b> APSC  <b>Department:</b> MEL and MHLP  <b>Faculty Approval Date:</b> Feb 28, 2019  <b>Effective Session (W or S):</b> Winter  <b>Effective Academic Year:</b> 2019/2020</p>	<p><b>Date:</b> 24<sup>th</sup> January, 2019  <b>Contact Person:</b> Helen May  <b>Phone:</b> 604-822-9415  <b>Email:</b> helen.may@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>Master of Engineering Leadership in Sustainable Process Engineering</b></p> <p><b>Program Overview</b>  The Master of Engineering Leadership in <b>Sustainable Process Engineering</b> (MEL in <b>SPE</b>) is a program within the Faculty of Applied Science.</p> <p>The <b>Sustainable Process Engineering</b> program focuses on developing Highly Qualified Personnel (HQP) <b>to lead the dynamically evolving green economy.</b> This sector is seeing opportunities in the development of green, sustainable products, and <b>processes</b> to replace <b>petroleum-derived</b> products and fuels. UBC has an exceptional <b>and growing</b> group of researchers <b>that are developing and commercializing cleaner processing technologies for the production of bio-based chemicals, fuels, and materials, as well as sustainable energy.</b></p> <p>Students will <b>be trained in the application of chemical and bioprocess engineering principles towards the design of sustainable products and manufacturing processes that utilize renewable feedstocks. Students will also be trained to perform life cycle and</b></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,195,981,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,195,981,0</a></p> <p><b>Present Calendar Entry:</b></p> <p><b>Master of Engineering Leadership in <del>Green BioProducts</del></b></p> <p><b>Program Overview</b>  The Master of Engineering Leadership in <del>Green BioProducts</del> (MEL in <del>GBPR</del>) is a program within the Faculty of Applied Science.</p> <p>The <del>Green BioProducts</del> program focuses on developing Highly Qualified Personnel (HQP) <del>needed for the rapidly evolving lignocellulosic biomass (Green) products sector.</del> This sector is seeing opportunities in the development of green, sustainable products, and <del>chemistries</del> to replace <del>oil- based</del> products and fuels. UBC has an exceptional group of researchers <del>working on development of advanced biomaterials, ranging from specialty paper applications to fibre and fibril reinforced materials and carbon fibres from lignin.</del></p> <p>Students will <del>develop mastery of knowledge related to the chemistry and anatomy of the tree, lignocellulosic separation chemistry, and the production pathways for biocomposites and fuels.</del></p> <p>This is a 12-month, full-time program for professionals who have relevant industry experience and are wanting to</p>



**technoeconomic analyses to develop and implement novel business models for the commercialization of sustainable products and processes.**

This is a 12-month, full-time program for professionals who have relevant industry experience and are wanting to accelerate their career.

The Faculty of Applied Science administers the Master of Engineering Leadership program. Please visit the [MEL website](#) for further information and contact details.

**Admission Requirements**

This program is delivered **by** the Department of Chemical & Biological Engineering (within the Faculty of Applied Science).

- Applicants must hold an undergraduate credential in Chemical and Biological Engineering, **Mechanical Engineering, Materials Engineering, Biomedical Engineering, Manufacturing Engineering, Engineering Physics, Environmental Engineering.**
- Have a minimum of three years relevant experience.

The minimum admission requirement for students with degrees from North American institutions is an average of 76% (UBC-equivalency), calculated from senior-level coursework. An applicant with an average slightly less than 76% may be admitted if they have achieved 80% or higher in at least 12 credits (UBC-equivalency) of senior-level coursework in the prospective area of study.

accelerate their career.

The Faculty of Applied Science administers the Master of Engineering Leadership program. Please visit the [MEL website](#) for further information and contact details.

**Admission Requirements**

This program is delivered ~~jointly between~~ the Department of Chemical & Biological Engineering (within the Faculty of Applied Science) ~~and the Faculty of Forestry.~~

- Applicants must hold an undergraduate credential in Chemical and Biological Engineering, ~~Forestry, Wood Products Processing, Chemistry or Plant Science, Biotechnology, Biochemistry, Biology or Biophysics or equivalent;~~
- Have a minimum of three years relevant experience.

The minimum admission requirement for students with degrees from North American institutions is an average of 76% (UBC-equivalency), calculated from senior-level coursework. An applicant with an average slightly less than 76% may be admitted if they have achieved 80% or higher in at least 12 credits (UBC-equivalency) of senior-level coursework in the prospective area of study.





The minimum admission requirement for applicants with degrees from outside North America is an overall degree average of 76% (UBC-equivalency).

Applicants from a university outside Canada in which English is not the primary language of instruction must present evidence of English language proficiency prior to being extended an offer of admission. Tests must have been taken within the last 24 months at the time of submission of your application. Acceptable English language proficiency tests for the MEL in **SPE** are:

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**Applicants who do not meet the academic requirements stated above, but who have had other significant formal training, relevant professional experience, and/or otherwise possess demonstrable knowledge or expertise that would prepare them adequately for successful study in the graduate program, may be granted admission on the recommendation of the Program Director and the approval of the Dean of Applied Science.**

**Lists of the required application documents are available on the [program website](#). The Professional Masters office is responsible for collection and assessment of application documents.**

### **Transfer Credit**

1. Graduate students who have earned credits for equivalent courses outside of the **SPE** program (e.g., from a different university, in a different UBC master's program, or as an unclassified student) may apply to transfer credits toward their

The minimum admission requirement for applicants with degrees from outside North America is an overall degree average of 76% (UBC-equivalency).

Applicants from a university outside Canada in which English is not the primary language of instruction must present evidence of English language proficiency prior to being extended an offer of admission. Tests must have been taken within the last 24 months at the time of submission of your application. Acceptable English language proficiency tests for the MEL in **GBPR** are:

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### **Transfer Credit**

1. Graduate students who have earned credits for equivalent courses outside of the **GBPR** program (e.g., from a different university, in a different UBC master's program, or as an unclassified student) may apply to transfer credits



MEL in **SPE** degree. Typically only 3 credits will be allowed to be transferred, provided that:

- The courses were not used as a basis for admission to the **SPE** program;
- The courses were not used to satisfy the requirements of another credential;
- The courses considered for transfer credit have been taken within five years of commencement of the **SPE** program;
- At least a B standing (UBC 74%) was obtained in courses considered for transfer.

2. Transfer credit may only be at the graduate level (500-/600-level).

3. Transferring credits is not permitted for APSC Professional Programs management and leadership courses, course code: APPP or Sauder business course codes.

4. Requests for transfer credit must be accompanied by a letter or memo of support from the Director of **SPE**, addressed to the Associate Dean of Applied Science. The letter must provide an academic justification for allowing the transfer credit on a course by course basis and be accompanied by a set of original transcripts from the completed course institution.

5. Transferring credits will not reduce tuition fees.

#### **Program Requirements**

**The degree requires completion of 30 credits: 12 platform and 18 Pillar credits.**

toward their MEL in **GBPR** degree. Typically only 3 credits will be allowed to be transferred, provided that:

- The courses were not used as a basis for admission to the **GBPR** program;
- The courses were not used to satisfy the requirements of another credential;
- The courses considered for transfer credit have been taken within five years of commencement of the **GBPR** program;
- At least a B standing (UBC 74%) was obtained in courses considered for transfer.

2. Transfer credit may only be at the graduate level (500-/600-level).

3. Transferring credits is not permitted for APSC Professional Programs management and leadership courses, course code: APPP or Sauder business course codes.

4. Requests for transfer credit must be accompanied by a letter or memo of support from the Director of ~~the program~~ **GBPR**, addressed to the Associate Dean of Applied Science. The letter must provide an academic justification for allowing the transfer credit on a course by course basis and be accompanied by a set of original transcripts from the completed course institution.

5. Transferring credits will not reduce tuition fees.

#### **Program Requirements**

~~Degree completion~~ requires completion of 30 credits. ~~This includes 18 credits of Pillar courses including 3 credits of~~



Platform **courses are designed** to **give** foundational coursework focused on the professional skills required for an experienced graduate to be an effective professional leader. These courses are common across the Applied Science Professional Master's programs **and includes 1.5 credits from approved electives offered by the Faculty of Commerce and Business Administration.** The Pillar **courses are designed to address** relevant technical material **and are chosen from an approved list.** Each student's coursework must be approved by the MEL in **Sustainable Process Engineering** graduate program office. A complete list of the courses required for successful completion are available on the program website.

~~constrained electives, and 12 credits of Platform courses, including 1.5 credits of approved electives from the Faculty of Commerce and Business Administration.~~

Platform ~~refers~~ to foundational coursework focused on the professional skills required for an experienced graduate to be an effective professional leader. These courses are common across ~~many of~~ the Applied Science Professional Master's programs. The Pillar ~~contains the~~ relevant technical material. Each student's coursework must be approved by the MEL in ~~Green Bio-Products~~ graduate program office. A complete list of the courses required for successful completion are available on the program website.

#### **Type of Action:**

Specialization Name Change

#### **Rationale for Proposed Change:**

The Green Bio-Products specialization is part of a suite of specializations Master of Engineering Leadership (MEL). The continued reduction in applications led to this program being put on hold for one year to conduct a faculty and industry review to ensure its relevance moving forward.

Feedback from prospective students, previous students and from industry has suggested that the Green Bio Products name is too niche and not broadly understood. This name suggests that the program is highly focused within one specific industry (Pulp & Paper).

Changing the specialization name to Sustainable Process Engineering (SPE) encompasses a much broader industrial audience and plethora of opportunities for its graduates. The term Sustainable



Process Engineering refers to the integration of sustainability goals within chemical process and / or bioprocess engineering. For example the term can pertain to a new process to produce a chemical or a product without emitting carbon dioxide, or to a new process and product that derives from renewable sources as opposed to petroleum, or to the production of bio-based products, bioenergy and biochemicals. It is therefore agnostic to the industrial sector.

Graduates of the Master of Engineering Leadership in Sustainable Process Engineering (MEL in SPE) can work in all sectors of natural resources processing which are aiming the sustainable extraction and processing of energy, mining and forest products. In addition they can work in the clean tech and biotech sector. These graduates will have the ability to enable move the industrial economy to a more sustainable state. Some may want to pursue a PhD with the idea to commercialize/start up new technologies or products.

UBC is one of the global leaders in research on sustainability and biomass conversion technologies. These graduates will be the interface for UBC's cutting-edge research with industry and businesses. The translation of laboratory innovations to commercial ventures necessitates strong technical foundations in the design, development and scale-up of manufacturing processes, a thorough understanding of technoeconomics, as well as relevant training in and support for entrepreneurship. This program has all the ingredients and potential to produce future leaders that will transform British Columbia into a hub of innovative cleantech businesses that will



generate thousands of new jobs and economic activity for the province in line with the CleanBC initiative.

**Type of Action:**

Change name of unit of record offering the program

**Rationale for Proposed Change:**

There is no longer a relationship with the Faculty of Forestry to deliver this program. Technical courses will be delivered by CHBE.

**Type of Action:**

Change program completion requirements

**Rationale for Proposed Change:**

After 3 years of teaching these technical courses, it has been found that the original Green Bio-Product technical classes are very constricted and focused on a niche specialty within a broader industry. A shift in politics and industry nationally and internationally in recent years has meant that the current suite of classes are not suitable or valuable for professional graduates of the MEL.

Taking advantage of the recent expansion and availability of Engineering Science and Technology courses in the department of Chemical and Biological Engineering (CHBE), it is proposed that the SPE specialization removes the constrained 3 technical electives and allow student to choose 18 credits from an approved list of courses - technology platforms (catalysis, biocatalysis, other core courses on technology), process engineering (reactor design, process control, chemical engineering design) and products and applications (bioenergy,



bioconversion, nanocellulose).

This would allow students a broader choice of courses depending on their background, experience and interest. They would benefit from the diversity of topics, and high- class instructors that have recently hired. It also gives the program flexibility to respond to external changes that have negatively impact the popularity of the degree.

**Type of Action:**

Changing admission requirements.

**Rationale for Proposed Change:**

The change in required bachelor degree for admission requirement reflects the shift in industrial and academic opportunities in the degree and subsequent employment. The proposed changes with the specialization means that the courses available to complete the degree are much more engineering focused. The shift from a science to an engineering background is to ensure that students entering the program are successful. Science students will likely have difficulty taking advanced engineering courses where there is an expectation that the fundamental engineering concepts will have already been covered in depth.

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<b>Faculty:</b> Commerce and Business Administration <b>Department:</b> <b>Faculty Approval Date:</b> 2019 Mar 21 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2019	<b>Date:</b> January 30, 2019 <b>Contact Person:</b> Jessica Hanna / Kin Lo <b>Phone:</b> 604-827-1732 / 604-822-8430 <b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / kin.lo@sauder.ubc.ca
<b>Proposed Calendar Entry:</b>  For students that started the Program from September 2015 through August 2017, please see the <a href="#">Academic Calendar Archive</a> .  For students that started the Program from September 2017 through August 2018, please see the <a href="#">Academic Calendar Archive</a> .   <b>Master of Business Administration (for students starting the Program September 2019 or later)</b>  The Master of Business Administration (MBA) provides an integrated course of study designed to prepare graduates to analyze problems, make decisions, and to manage, motivate, and lead people and organizations. Principal program components include a foundation in business, integration, and career development components throughout the program, a choice of career track, and elective courses.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1267">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1267</a>  <b>Present Calendar Entry:</b>  <del>For students that started the Program from September 2013 through August 2014, please see the <a href="#">Academic Calendar Archive</a>.</del>  <del>For students that started the Program from September 2014 through August 2015, please see the <a href="#">Academic Calendar Archive</a>.</del>  For students that started the Program from September 2015 through August 2017, please see the <a href="#">Academic Calendar Archive</a> .  Master of Business Administration (for students starting the Program September <del>2017 or later</del> )  The Master of Business Administration (M-B-A-) provides an integrated course of study designed to prepare graduates to analyze problems, make decisions, and to manage, motivate, and lead people and organizations. Principal program components include a foundation in business, integration, and career development components throughout the program, a choice of career track, and elective courses. <del>A pre-program Sauder Preparation provides fundamentals for students who lack adequate academic preparation for the Program.</del>

## Admission Requirements

Admission to the MBA Program is competitive and takes into consideration a variety of criteria: previous academic performance, GMAT/GRE test scores, professional experience, maturity, and fit. Enrolment is limited; admission to the program is competitive and generally requires an academic standing higher than the published minimum.

Applicants must hold an undergraduate degree with a minimum overall B+ average or 76% or recognized equivalent from an accredited institution. If the applicant has sufficient professional experience or presents sufficiently high GMAT/GRE scores, a lower average may be accepted, subject to approval of the Director of the Robert H. Lee Graduate School.

Applicants must hold the equivalent of a four-year bachelor's degree. Three-year bachelor's degrees are accepted from Australia, New Zealand, the U.K. and Europe. Additional details on acceptable international credentials are available [here](#).

Applicants must present minimum GMAT or GRE score:

- 550 GMAT with at least a 50th percentile in the quantitative and verbal sections of the test; or
- 155 GRE score on each of the verbal and quantitative sections.

Applicants from universities outside Canada in which English is not the primary language of instruction must present evidence of English language proficiency prior to being extended an offer of admission. Tests must have been taken within the last 24 months at the time of submission of your application. Acceptable

~~The Program is delivered over 16 months of full-time study.~~

~~Visit the Program's website for more information on admissions requirements and current program details.~~

~~Upon accepting an offer of admission to the M.B.A. Program, students will be required to pay a non-refundable deposit, which is applied to the first installment of tuition fees.~~

## *Sauder Preparation*

~~Students with limited management background or who lack adequate preparation in prerequisite courses will be required to participate in the Program Preparation courses. The online Program Preparation provides non-credit basic business education and should be completed prior to program orientation. Topics include economics, quantitative methods, and business statistics. Since backgrounds vary, the extent of a student's required participation should be determined in consultation with an M.B.A. program advisor.~~

## *Integrated Professional Development*

~~The integration of the various business disciplines and professional development are key features of the Program. This integrated professional development includes several components offered throughout the program, including Foundation, Global, Experiential Learning, and Capstone.~~



English language proficiency tests for the MBA are:

- TOEFL (Test of English as a Foreign Language): 100 (Internet version)
- IELTS (International English Language Testing Service): minimum overall band score of 7.0 with no other component score less than 6.0
- MELAB (Michigan English Language Assessment Battery): minimum overall score of 84
- PTE (Pearson Test of English - Academic): minimum overall score of 70
- CAEL (Canadian Academic English Language Test) minimum overall score of 70

Applicants must present a minimum of 2 years of full-time work experience gained after graduation from a bachelor's degree.

Evaluation for admission is based on academic records, Graduate Management Admission Test (GMAT) scores, full-time work experience, essays, & letters of recommendation. Applicants being seriously considered for admission will be contacted by the Robert H. Lee Graduate School for an interview either in person or by Skype or phone.

Upon accepting an offer of admission to the MBA Program, students will be required to pay a non-refundable and non-transferable deposit, which is applied to the first installment of tuition fees.

### **Program Requirements**

Completion of the MBA program requires 51.5 credits of course work completed over 16 months of full-time study. This includes:

- Mandatory Opening Week Orientation
- 15 credits of Foundational courses
- 9.5 credits of Business Strategy Integration courses which includes a 2 week Global Immersion Experience abroad
- 6 credits of Thematic courses
- 21 credits of elective courses

Elective credits can be completed from courses offered in the MBA program, the Professional MBA program, the International MBA Program, and selected global learning opportunities offered by the Robert H. Lee Graduate School. Each student's coursework must be approved by the School. A complete list of the courses required for successful completion may be obtained from the School.

Career Development programming offered by the Hari B. Varshney Business Career Centre for MBA students is a critical and required experience to the program. Students are expected to attend and participate fully as per the program requirements listed on the Robert H. Lee Graduate School program site.

### Career Tracks

Each student in the MBA Program may choose one of the offered career tracks or opt to do a "customized" program of study. Requirements vary between career tracks; however, each consists of a set of 6 credits of required courses available from the Robert H. Lee Graduate School and 15 elective credits. Career Tracks include: Innovation & Entrepreneurship, Finance, Product & Service Management, and Technology & Analytics Leadership

### Career Tracks

Each student in the M.B.A. Program may choose one of the offered career tracks or opt to do a "customized" program of study. Requirements vary between career tracks; however, each consists of a set of required modules. ~~A list of current career tracks and requirements may be obtained from the Robert H. Lee Graduate School.~~

### ~~Study Abroad and Exchange~~

~~Study abroad and exchange programs are available at several international partner universities. Students who are selected to participate in this program will be enrolled in BA 530 by the Robert H. Lee Graduate School. See International Exchange for further details.~~

### Type of Action:

- Update Calendar.
- Include description of admission requirements previously listed outside the Calendar; these requirements are the same as for the Professional MBA (formerly the part-time variate of the MBA).
- Include program requirements previously listed outside of the Calendar.
- Provide additional information on career tracks.
- Add information and links for global learnings options, academic policies, and contacts.

### Rationale for Proposed Change:

<p><b>Global Learning Options</b></p> <p>A variety of study abroad and exchange programs are available at several international partner universities. Global opportunities via the <a href="#">Global Network for Advanced Management</a> are also available during the program.</p> <p><b>Academic Policies</b></p> <p>Refer to the <a href="#">Academic Calendar</a> for academic regulations.</p> <p><b>Contact Information</b></p> <p>Please see the <a href="#">MBA Program</a> site for further program and contact information.</p>	<p>We are providing important information that has been previously left out of the Calendar.</p> <p>Section on “Sauder Preparation” has been removed as it is not part of the program.</p> <p>“Career Tracks” section now includes the new Technology and Analytics Leadership track, along with the existing tracks.</p>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Education <b>Department:</b> ECPS <b>Faculty Approval Date:</b> March 12, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019-2020	<b>Date:</b> January 14, 2019 <b>Contact Person:</b> Laurie Ford <b>Phone:</b> 604-822-0091 <b>Email:</b> laurie.ford@ubc.ca
<p><b>Proposed Calendar Entry:</b></p> <p><b>School and Applied Child Psychology</b></p> <p>Degrees Offered: Ph.D., M.A., M.Ed.</p> <p><b>Program Overview</b></p> <p>The School and Applied Child Psychology graduate programs prepare students to become psychologists who work in a variety of settings including: research, academic, school, community, and private settings. The primary goal of the program is to develop professional psychologists whose research, training, and practice activities increase the educational and psychological well-being of children and youth. The program follows a scientist-practitioner model, with emphasis on the integration of theory, research, and clinical skills. Training encompasses academic, social, emotional, behavioural, consultation, intervention, and prevention domains. Students receive training in the integration of assessment and intervention, and in relevant professional, legal, and ethical issues. Science and professional practice are viewed as interactive and complementary, with research integrated across core psychological and educational foundations, as well as relevant practical experiences at all levels of the program. The program places a strong emphasis on</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,1226">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,1226</a></p> <p><b>Present Calendar Entry:</b></p> <p><b>School Psychology</b></p> <p>Degrees Offered: Ph.D., M.A., M.Ed.</p> <p><b>Program Overview</b></p> <p>The School Psychology graduate program prepares students to become psychologists who work in schools, academic, research, community, and private practice settings. The primary goal of the program is to develop professional psychologists whose research, training, and practice activities increase the educational and psychological well-being of children and youth. The program follows a scientist-practitioner model, with emphasis on the integration of theory, research, and clinical skills. Training encompasses academic, social, behavioural, consultation, intervention, and prevention domains, and students receive training in the integration of assessment and intervention, and in relevant professional, legal, and ethical issues. Science and professional practice are viewed as interactive and complementary, with research integrated across core psychological and educational foundations, as well as relevant practical experiences at all levels of the program. The program places a strong emphasis on evidence-based prevention, intervention, and systems-level</p>



evidence-based prevention, intervention, and systems-level change. In addition school **and applied child** psychology training at UBC maintains a strong appreciation for diversity, in terms of the populations served; the students admitted; **languages spoken**; issues and elements of practice examined and trained; and the provision of skills and experiences in working with a broad range of clients, families, and settings.

### Doctor of Philosophy

The doctoral program in school **and applied child** psychology is designed to prepare psychologists who can serve as **researchers, academics**, practitioners, supervisors, and leaders in school **and applied child** psychology.

### Admission Requirements

In addition to the minimum admission requirements set by the Faculty of Graduate Studies, students admitted to the Ph.D. degree program normally possess an M.A. in School **and Applied Child** Psychology equivalent to the requirements of the UBC M.A. program and graduate or senior undergraduate preparation in **human development, history and systems of psychology, biological bases of behaviour, and basic interviewing skills**. Prerequisites not met prior to entry may be included in the doctoral program of study. Transfer from the M.A. to the Ph.D. program is permitted under regulations set by the Faculty of Graduate and Postdoctoral Studies.

Students are required to complete the GRE with a minimum score of 153 on verbal and 144 on quantitative categories. Applicants for whom English is not their primary language should write the GRE but inform

change. In addition school psychology training at UBC maintains a strong appreciation for diversity, in terms of the populations served; the students admitted; ~~the~~ issues and elements of practice examined and trained; and the provision of skills and experiences in working with a broad range of clients, families, and settings.

### Doctor of Philosophy

The doctoral program in school psychology is designed to prepare psychologists who can serve as practitioners ~~and~~ supervisors ~~in the field, trainers of school psychologists, researchers~~, and leaders in school psychology.

### Admission Requirements

In addition to the minimum admission requirements set by the Faculty of Graduate Studies, students admitted to the Ph.D. degree program normally possess an M.A. in School Psychology equivalent to the requirements of the UBC M.A. program and graduate or senior undergraduate preparation in ~~Human Development~~. Prerequisites not met prior to entry may be included in the doctoral program of study. Transfer from the M.A. to the Ph.D. program is permitted under regulations set by the Faculty of Graduate and Postdoctoral Studies.

Students are required to complete the GRE with a minimum score of 153 on verbal and 144 on quantitative categories. Applicants for whom English is not their primary language should write the GRE but inform



the admissions committee of this fact.

Minimum TOEFL scores are 600 (paper), 250 (computer-based), or 100 (internet-based: 22 Reading, 22 Writing, 25 Listening, 25 Speaking).

### Program Requirements

The typical doctoral program is **32** credits, beyond completion of the UBC School **and Applied Child** Psychology M.A. or equivalent program.

**An emphasis of the program is on making systems level change. All students take coursework in all of the following areas:**

- **consultation (EPSE 551) community systems (EPSE 633),**
- **diversity (courses to be approved by the program advisor)**
- professional practice (e.g., prevention, intervention, assessment; **courses to be approved by the program advisor**)
- psychological foundations (**courses to be approved by the program advisor**)
- research methodology (**courses to be approved by the program advisor**)

**Students complete practicum experiences in at least two years of the program including on and off campus placements and experience doing supervision. A year-long pre-doctoral internship is also required. In addition, all** doctoral students are required to successfully complete a comprehensive examination. The final requirement for the Ph.D. is completion of a research dissertation meeting the Faculty of Graduate and Postdoctoral

the admissions committee of this fact.

Minimum TOEFL scores are 600 (paper), 250 (computer-based), or 100 (internet-based: 22 Reading, 22 Writing, 25 Listening, 25 Speaking).

### Program Requirements

The typical doctoral program is **48** credits, beyond completion of the UBC School Psychology M.A. or equivalent program.

~~With an emphasis on leadership in facilitating systems level change, all students take coursework in school, family and community systems, and diversity issues (9 credits), as well as coursework in professional practice (e.g., prevention, intervention, assessment) (6 credits), psychological foundations (9 credits), and research methodology (9 credits). Students complete supervision and specialty practicum placements (3 credits each), as well as~~ a year-long pre-doctoral internship ~~(9 credits)~~. All doctoral students are required to successfully complete a comprehensive examination. The final requirement for the Ph.D. is completion of a research dissertation meeting the Faculty of Graduate and Postdoctoral Studies requirements.



Studies requirements.

## Master of Arts

### Admission Requirements

In addition to the minimum admission requirements set by the Faculty of Graduate and Postdoctoral Studies (normally, a four-year bachelor's degree with a B+ average in third and fourth year-level coursework) in a relevant area of study, students are required to meet the following pre-requisite requirements:

- a minimum of 18 credits in psychology, educational psychology, or special education and related disciplines, **including CNPS 362 or an equivalent undergraduate course in basic interviewing skills.**
- senior-level **undergraduate** coursework in measurement, statistics, and research methodology **(with the permission of the faculty program advisor, a data-based undergraduate honours thesis can be used to meet the research methodology requirement).**
- **research experience which may be documented in a number of ways including an undergraduate honours thesis, paid research position, volunteer in a research lab for a semester or more, etc.**
- evidence of suitability for professional work with school-aged populations, including successful work experience with school-aged populations, school-based experience, and/or teacher

## Master of Arts

### Admission Requirements

In addition to the minimum admission requirements set by the Faculty of Graduate and Postdoctoral Studies (normally, a four-year bachelor's degree with a B+ average in third- and fourth-year level coursework) in a relevant area of study, students are required to meet the following pre-requisite requirements:

- a minimum of 18 credits in psychology, educational psychology, or special education and related disciplines
- senior-level coursework in measurement, statistics, and research methodology
- evidence of suitability for professional work with school-aged populations, including successful work experience with school-aged populations, school-based experience, and/or teacher certification





certification.

Students are required to complete the GRE with a minimum score of 153 on verbal and 144 on quantitative categories. Applicants for whom English is not their primary language should write the GRE but inform the admissions committee of this fact. Minimum TOEFL scores are 600 (paper), 250 (computer-based) or 100 (internet-based: 22 Reading, 22 Writing, 25 Listening, 25 Speaking).

### Program Requirements

The **School and Applied Child Psychology** Master of Arts (M.A.) program requires **two** years of full time study **including practicum experiences throughout the program**. The full program requires **42** credits. In exceptional circumstances up to 12 credits of coursework may be waived in recognition of previous course work and/or relevant work experience.

Students are required to complete a sequence in **school and applied psychology practice**, including coursework in **all of the following areas**:

- professional, ethical and legal issues in school psychology (**EPSE 550**)
- cognitive, academic, and social-emotional assessment (**EPSE 535, EPSE 556**)
- **educational and psychological prevention and intervention** (courses to be approved by program advisor)
- psychopathology (**EPSE 506**)
- cognitive and affective theories (**EPSE 553**)
- measurement and psychometrics (**EPSE 528**)
- research methods (courses to be

Students are required to complete the GRE with a minimum score of 153 on verbal and 144 on quantitative categories. Applicants for whom English is not their primary language should write the GRE but inform the admissions committee of this fact. Minimum TOEFL scores are 600 (paper), 250 (computer-based) or 100 (internet-based: 22 Reading, 22 Writing, 25 Listening, 25 Speaking).

### Program Requirements

The **SCPS** Master of Arts (M.A.) program requires **three**-years of full-time study, **including both on-campus courses and school-based practicum/internship experiences**. The full program requires **61** credits. In exceptional circumstances up to 12 credits of coursework may be waived in recognition of previous course work and/or relevant work experience. Students are required to complete a sequence in **School Psychology Practice**, including coursework in:

- professional, ethical, and legal issues in school psychology **(3 credits)**
- **consultation (3 credits)**
- cognitive **(4 credits)**, academic **(6 credits)**, and social-emotional **(3 credits)**-assessment **and intervention**
- **school-based interventions (3 credits)**
- **psychological foundations, including cognitive bases of behaviour (3 credits), and psychopathology (3 credits)**

**Research coursework includes measurement and statistics (9 credits) and a master's thesis (6 credits). A ten-month integrated field practicum is completed in year two (9 credits), in addition to the**





<p><b>approved by program advisor).</b></p> <p><b>Practicum is completed in both years of the program. All students must complete a data-driven thesis.</b></p> <p><b>The program is designed for students who intend continue directly to doctoral study in school and applied child psychology upon M.A. program completion.</b> Promotion to graduation or continuation in the program requires that students demonstrate interpersonal and ethical qualities commensurate with working in educational and community settings.</p> <p>For B.C. teachers: Teacher Qualification Service requires a capstone experience, met in this program with the completion of the thesis.</p> <p><b>Master of Education</b></p> <p><b>Admission Requirements</b></p> <p>In addition to the minimum admission requirements set by the Faculty of Graduate and Postdoctoral Studies (normally, a four-year bachelor's degree with a B+ average in third and fourth year-level coursework) in a relevant area of study, students are required to meet the following pre-requisite requirements:</p> <ul style="list-style-type: none"> <li>• a minimum of 18 credits in psychology, educational psychology, or special education and related disciplines, <b>including CNPS 362 or an equivalent undergraduate course in basic interviewing skills.</b></li> <li>• senior-level <b>undergraduate</b> coursework in measurement, statistics, and research methodology</li> </ul>	<p><b>intensive school-based practicum/internship in year three (9 credits).</b></p> <p>Promotion to graduation or continuation in the <b>School Psychology</b> program requires that students demonstrate interpersonal and ethical qualities commensurate with working in educational and community settings.</p> <p>For B.C. teachers: Teacher Qualification Service requires a capstone experience, met in this program with the completion of a thesis.</p> <p><b>Master of Education</b></p> <p><b>Admission Requirements</b></p> <p>In addition to the minimum admission requirements set by the Faculty of Graduate and Postdoctoral Studies (normally, a four-year bachelor's degree with a B+ average in third and fourth year-level coursework) in a relevant area of study, students are required to meet the following pre-requisite requirements:</p> <ul style="list-style-type: none"> <li>• a minimum of 18 credits in psychology, educational psychology, or special education and related disciplines</li> <li>• senior-level coursework in measurement, statistics, and research methodology</li> </ul>
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(with permission of the faculty program advisor, a data-based undergraduate honours thesis can be used to meet the research methodology requirement).

- evidence of suitability for professional work with school-aged populations, including successful work experience with school-aged populations, school-based experience, and/or teacher certification

Students are required to complete the GRE with a minimum score of 153 on verbal and 144 on quantitative categories. Applicants for whom English is not their primary language should write the GRE but inform the admissions committee of this fact. Minimum TOEFL scores are 600 (paper), 250 (computer-based) or 100 (internet-based: 22 Reading, 22 Writing, 25 Listening, 25 Speaking).

### Program Requirements

The **School and Applied Child Psychology** Master of Education (M.Ed.) program requires three years of full time study, including both on-campus courses and school-based internship experiences. The full program requires **42 credits**. In exceptional circumstances up to 12 credits of coursework may be waived in recognition of previous course work and/or relevant work experience. Students are required to complete a sequence in School **and Applied Child Psychology Practice**, including coursework in **all of the following areas**:

- professional, ethical and legal issues in school psychology (courses to be approved by program advisor)
- consultation (courses to be

- evidence of suitability for professional work with school-aged populations, including successful work experience with school-aged populations, school-based experience, and/or teacher certification

Students are required to complete the GRE with a minimum score of 153 on verbal and 144 on quantitative categories. Applicants for whom English is not their primary language should write the GRE but inform the admissions committee of this fact. Minimum TOEFL scores are 600 (paper), 250 (computer-based) or 100 (internet-based: 22 Reading, 22 Writing, 25 Listening, 25 Speaking).

### Program Requirements

The ~~SCPS~~ Master of Education (M.Ed.) program requires three years of full time study, including both on-campus courses and school-based ~~practicum~~/internship experiences. The full program requires **55 credits**. In exceptional circumstances up to 12 credits of coursework may be waived in recognition of previous course work and/or relevant work experience. Students are required to complete a sequence in School Psychology Practice, including coursework in:

- professional, ethical and legal issues in school psychology (~~3 credits~~)
- consultation (~~3 credits~~)
- cognitive (~~4 credits~~), ~~academic~~ (~~6 credits~~), and ~~social-emotional~~ (~~3 credits~~) ~~assessment and intervention~~



- approved by program advisor)
- cognitive, academic and social-emotional assessment (EPSE 555, EPSE 556)
- school-based psychological intervention and prevention (EPSE 552)
- psychopathology (EPSE 507)
- academic and behavioural interventions (EPSE 531, EPSE 576)
- measurement and psychometrics (EPSE 528)

An eight-month integrated practicum is completed in year two in addition to the intensive 10-month school-based internship in year three. This internship includes the development of a professional portfolio that brings together the students' goals and objectives as well as their accomplishments and experiences in the program.

Promotion to graduation or continuation in the School and Applied Child Psychology program requires that students demonstrate interpersonal and ethical qualities commensurate with working in educational and community settings.

For B.C. teachers: Teacher Qualification Service requires a capstone experience, met in this program with the intensive internship and development of the professional portfolio.

- school-based interventions (3 credits)
- psychological foundations including cognitive bases of behaviour (3 credits), and psychopathology (3 credits)

Research coursework includes measurements and statistics (6 credits). A ten-month integrated field-practicum is completed in year two (9 credits) in addition to the intensive school-based practicum/internship in year three (9 credits).

M.Ed. students participate in a graduating seminar (3 credits) that brings together their goals and objectives as well as their accomplishments and experiences throughout the program in the development of a professional portfolio.

Promotion to graduation or continuation in the School Psychology program requires that students demonstrate interpersonal and ethical qualities commensurate with working in educational and community settings.

For B.C. teachers: Teacher Qualification Service requires a capstone experience, met in this program with the development of a professional portfolio.

#### Type of Action:

1. Change of Program Title
2. Change admission and program requirements for Ph.D. degree program
3. Change admission and program requirements for M.A. degree program
4. Change admission and program requirements for M.Ed. degree program

**Rationale for Proposed Change:**

The faculty associated with the School Psychology Graduate Programs have engaged in systematic review of the MEd, MA, and PhD programs to ensure that program goals and content are consistent with established and current academic and professional standards. The review has indicated a need to revise the MA to PhD program sequence for students preparing for a research and professional career, and to provide adequate opportunities for the development of academic scholarship and excellent clinical and professional preparation. The curriculum changes that result from this revision of the research-stream curriculum of the MA and PhD programs allows for professional practice stream at the master's level (MEd program) and a need for a program name change.

In recent years it has been apparent that the program name "school psychology" can be limiting to students seeking internships and graduates seeking employment in settings beyond a traditional school setting. While schools are a place of practice, school psychology also a professional area of psychology. It is an area where students are trained in many aspects of applied child psychology and service provision in and out of schools. Many in the field do not always understand that the profession of school psychology is not just a place but also an area of professional training and those with a degree in school psychology have training beyond just schools and practice in many settings. In recent years a number of programs in School Psychology in Canada have expanded their program name to add some breadth to the focus of practice and take the emphasis off school psychology as a place to help address these issues. Currently all the accredited doctoral programs in Canada have a name that is



expanded beyond School Psychology with most using the name School and Applied Child Psychology. This is also the name of the doctoral internship program at UBC. We believe the proposed program name change is important to better represent the breadth of training in our program and to help facilitate internship placements and professional opportunities for our students upon graduation as well as to be more consistent with training programs in the field across Canada.

Prior to this review, the MEd and MA program requirements were virtually the same without the thesis requirement. The changes to the M.A. and Ph.D. programs allow for a better integrated sequence across the programs. It is also more consistent with models of school and applied child psychology preparation across Canada.

The proposed Ph.D. program revision includes several revised courses including (being put through under separate curriculum change documents), a new prerequisite, and fewer credits. The program includes academic (research, professional practice, and psychological bases) and clinical coursework and a year-long pre-doctoral internship. The revised sequence will allow for more time to focus on research along with the academic and clinical preparation to facilitate their transition to work as a psychologist upon program completion and greater flexibility in course selection to best meet their professional goals. The program revisions also reflect current and efficient reorganization of program content and provides program students with access to expertise across graduate programs within the department.

Specific changes for the PhD:



1. Additional prerequisite of coursework in basic interviewing skills– adding this will strengthen the skills of incoming students in the critical interpersonal communication skills needed in professional practice.
2. Better clarifying the pre-requisite that students have prior coursework in history and systems of psychology and biological bases of behavior at the undergraduate level. These are requirements of our CPA accreditation. We have found that most students have this at the undergrad level. By moving them to pre-requisites adds flexibility. If these are not met prior to entry they may be taking as a part of their Ph.D. program.
3. Change total program credits required from 48 to 32. This reflects the revisions in curriculum, rearrangement of content, deletion of some course requirements, and better integration across the MA and PhD programs.
4. Specific coursework changes for the PhD include: the addition of EPSE 551: Consultation (moved from the MA program); reduction in the requirement for an additional course in diversity (the required course in diversity can be taken as one of the other required courses if the course has a diversity focus such a Cross-Cultural Counselling or Indigenous Research Methods or as a stand alone 3 credit course related to diversity); adding a required course in behavioral assessment and intervention (EPSE 576); reduction in the required research course work (from 9 to 6 credits) to allow for greater flexibility in course selection; reduction in the



professional practice course work requirements (from 9 to 6 credits) to allow for greater flexibility in course selection; reduction in the required number of credits for CNPS 587 History and Systems of Psychology from 3 to 1 credit; and revision of the approach to practicum to include an integrated practicum including practice and supervision in the first two years of the program.

The proposed MA program revision includes several revised and new courses, a new prerequisite, and fewer credits. The program includes academic and clinical coursework but no master's internship, an option in the previous program. The revised sequence will allow for more focus on research along with the academic and clinical preparation to facilitate their transition to doctoral study. The program revisions also reflect current and efficient reorganization of program content and provides program students with access to expertise across graduate programs within the department.

Specific changes for the MA:

1. Add prerequisite CNPS 362 – adding this will strengthen the skills of incoming students in the critical interpersonal communication skills needed in professional psychology practice. This has been added to the M.Ed. program admission as well.
2. Clarify that the senior level coursework required in measurement and statistics is undergraduate courses.
3. Change total program credits required from 55 to 42. This reflects the revisions in curriculum, rearrangement of content, deletion of some course requirements.



4. Specific coursework changes for the M.A. program include: an integrated Cognitive and Academic Assessment course (EPSE 556) instead of both EPSE 554 and EPSE 534; A revised EPSE 535 with focus on Social and Emotional Assessment; a new course in psychopathology with a life span approach (EPSE 506) replacing EPSE 507 which has a child and youth focus; addition of a course in social and emotional interventions in children and youth (selected with approval of the faculty advisor from a list of options); restructuring of the practicum sequence to include an integrated practicum across the 1<sup>st</sup> and 2<sup>nd</sup> year of the program and reduction in the required research coursework from 6 to 3 credits. The option of a master's level internship has been removed.
5. Indicate that some prior research experiences are a pre-requisite.

The proposed MEd program revision includes several revised and new courses, a new prerequisite and fewer credits. The program includes academic and clinical coursework and a 10-month internship, which together exceed the current requirements for Master's-level School Psychology practice in British Columbia. The program revisions also reflect current and efficient reorganization of program content and provides program students with access to expertise across graduate programs within the department. There are currently no students registered in the MEd in School Psychology.

Specific changes:

1. Add prerequisite CNPS 362 – adding this will strengthen the skills of incoming students in the critical interpersonal communication skills





needed in school-based practice.  
This will likely be added to the MA program admission as well.

2. Clarify that the senior level coursework required in measurement and statistics is undergraduate courses.
3. Change total program credits required from 55 to 42. This reflects the revisions in curriculum, rearrangement of content, deletion of some course requirements.
4. Specific coursework changes for the MEd include: Replacing EPSE 534 and EPSE 535 with a new integrated course in Academic and Social-Emotional Assessment (EPSE 555); a change in EPSE 552 to include greater focus on school-based mental health; the additional of a course in behavioural assessment and intervention (EPSE 576); adjustment to the practicum sequence to include only a 10 month integrated practicum in year two; removal of the portfolio course and having a portfolio requirement added to the 10 month internship.



## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Science <b>Department:</b> Mathematics <b>Faculty Approval Date:</b> March 6, 2019 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2019	<b>Date:</b> March 6, 2019 <b>Contact Person:</b> Warren Williams <b>Phone:</b> 604-822-8719 <b>Email:</b> wwarren@mail.ubc.ca
<b>Proposed Calendar Entry:</b>  Mathematics  Degrees Offered: Ph.D., M.Sc.  ...	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,1194">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,1194</a>  <b>Present Calendar Entry:</b>  Mathematics  Degrees Offered: Ph.D., <del>M.A.</del> , M.Sc.  ...  <del>Master of Arts</del>  <del>Admission Requirements</del>  <del>Students admitted to the M.A. degree program normally possess a bachelor's degree in Mathematics or a related area, and must meet the general admission requirements for master's degree programs set by the Faculty of Graduate and Postdoctoral Studies.</del>  <del>For detailed information and requirements for degree programs, please see Mathematics.</del>  <del>Program Requirements</del>  <del>The M.A. program requires a minimum of 30 credits, including a 12 credit thesis. Courses may be selected from Mathematics and a wide range of related programs on campus, in consultation with the student's supervisor and the supervisory committee.</del>  <hr style="border: 0; border-top: 1px solid red; margin-top: 20px;"/>

**Action:** Delete the degree program Master of Arts in Mathematics.

**Rationale:** The program content and requirements are identical to those of the Master of Science in Mathematics. The M.Sc. program in Mathematics is thriving and serving students well; there have been no graduates at all from the MA program since 2005. The attached spreadsheet shows the number of graduate students enrolled and completed since 2010.

**SCI-18-2-Master of Arts SCI-18-2-Master of Arts**

<b>Graduate Program STATS</b>								
<b>Academic Year</b>	<b>Total Enrolled</b>	<b>MSC Enrolled</b>	<b>MA Enrolled</b>	<b>PhD Enrolled</b>		<b>MSc Degrees</b>	<b>MA Degrees</b>	<b>PhD Degrees</b>
2010	110	46	0	64		19	0	19
2011	127	52	0	75		18	0	9
2012	110	39	0	71		23	0	8
2013	98	29	0	69		21	0	14
2014	98	33	0	65		11	0	9
2015	88	26	0	62		11	0	19
2016	91	20	0	71		13	0	12
2017	104	32	0	72		10	0	11
2018	101	31	0	70		8	0	10

15 May 2019

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 new course codes, new courses, revised courses, new program, new specialization, new concentrations, new co-operative education program option, revised program requirements, and revised academic regulations brought forward by the faculties of Applied Science, Arts, Commerce and Business Administration, Education, Graduate and Postdoctoral Studies (Applied Science, Arts, Commerce and Business Administration, Education, and Land and Food Systems) and Science be approved.”*

Respectfully submitted,

Dr. Peter Marshall, Chair

Senate Curriculum Committee

## **FACULTY OF APPLIED SCIENCE**

### *New program*

Bachelor of Applied Science in Environmental Engineering

### *New course code*

ENVE: Environmental Engineering

### *New courses*

**ENVE 200 (4)** Environmental Engineering Design and Decision Making; **ENVE 201 (3)** Technical Communications for Environmental Engineering; **ENVE 202 (4)** Environmental Engineering Science; **ENVE 203 (4)** Environmental Engineering and Sustainability; **ENVE 301 (3)** Environmental Engineering Intermediate Design Project; **ENVE 401 (6)** Environmental Engineering Capstone Project; **CHBE 451 (3)** Engineering Thermodynamics and Statistical Mechanics; **CPEN 223 (4)** Software Design for Engineers; **MANU 201 (3)** Technical Communication

### *Revised program requirements*

Bachelor of Applied Science in Mining Engineering

## **FACULTY OF ARTS**

### *New courses*

**ARCL 235 (3)** Controlling Nature: Plant and Animal Domestication; **ARCL 345 (3)** Molecular Archaeology; **ASIA 395 (3)** Modern Persian Literature; **ASIA 461 (3)** Gender and Sexuality in Modern Iranian Narratives; **CENS 308 (3)** Comics and Graphic Novels in Central, Eastern and Northern Europe; **CLST 101 (3)** Greek and Latin Roots of English

## **FACULTY OF BUSINESS ADMINISTRATION**

### *Revised academic regulations*

Bachelor of Commerce>Academic Regulations>Dean's Honour Roll

### *New concentrations*

Business Law Concentration

Business Analytics Concentration

### *New course*

COMM 435

## **FACULTY OF EDUCATION**

### *New specialization*

NITEP Specialization in Indigenous Education

## **FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES**

### **Applied Science**

### *New course code and new courses*

AQUA: Aquaculture

**AQUA 501 (3)** Aquaculture Production Systems; **AQUA 502 (2)** Fish Nutrition, Feeds and Feeding; **AQUA 503 (3)** Fish Health; **AQUA 504 (2)** Finfish Genetics and Reproduction in Aquaculture; **AQUA 505 (2)** Ecological Sustainability of Aquaculture; **AQUA 506 (2)** Business Concepts in Aquaculture; **AQUA 507 (2)** Seafood Processing; **APSC 542 (3)** Leadership for Applied Scientists

### *New course code*

SPE: Sustainable Process Engineering

*Revised courses*

**SPE 503 (3)** Sustainable Bioenergy and Biorefinery; **SPE 502 (3)** Sustainable Bioproducts Processing

**Arts**

*New courses*

**LATN 503 (3-6) d** Studies in Latin Prose and Verse; **GREK 503 (3-6) d** Studies in Ancient Greek Prose and Verse; **ARST 585 (3)** Information Practice and Protocol in Support of Indigenous Initiatives

**Commerce and Business Administration**

*New courses*

**BA 515 (1.5)** Fundamentals of Analytics & Tech; **BAEN 581 (1.5-3.0) d** Contemporary Topics in Technology & Business; **BAIT 515 (1.5)** AI Commercialization; **BAIT 516 (1.5)** Health & Technology; **BAIT 517 (1.5)** Applications of Predictive Analytics & Machine Learning; **BAIT 518 (1.5)** Data Visualization; **BAIT 519 (1.5)** Managing Automation; **BAIT 523 (1.5)** FinTech; **BAMA 520 (1.5)** Customer Analytics; **BAMA 521 (1.5)** Business Development for Scaling Up

**Education**

*New courses*

**LLED 521 (3)** Interculturality in Language Education: Theories, Research, and Practice; **EPSE 506 (3)** Applied Psychopathology Across the Lifespan; **EPSE 555 (3)** Academic and Social-Emotional Assessment; **EPSE 556 (3)** Cognitive and Academic Assessment Practicum; **EPSE 634 (3-9) d** Special Topics in Advanced Assessment in School and Applied Child Psychology; **ETEC 542 (3)** Culture and Communication in Virtual Environments

**Land and Food Systems**

*New course*

**PLNT 590 (3)** Advanced Topics in Plant Science

**FACULTY OF SCIENCE**

*New courses*

**CAPS 210 (3)** Exploring the Human Body: How the body works; **CPSC 203 (3)** Programming, Problem Solving, and Algorithms

*New co-op program option*

Bachelor of Science>Forensic Science>Co-operative (Co-op) Education Option

**The University of British Columbia**

Faculty of Applied Science

**New Program Proposal**

**APSC Bachelor of Applied Science**

**Environmental Engineering**

Approved at the  
APSC Engineering Faculty Meeting  
8 November 2018



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## **EXECUTIVE SUMMARY**

### **Overview**

The opportunity to pursue an Environmental Engineering (ENVE) undergraduate degree in Vancouver is proposed by the Faculty of Applied Science at the University of British Columbia. The program will draw extensively on the expertise and enthusiasm of faculty in the Departments of Civil Engineering and Chemical and Biological Engineering, both ranked among the top two in Canada and among the top 25 in the world in their respective disciplines. Faculty members from these departments have collaborated to create a unique program covering the diverse range of knowledge needed for Environmental Engineers to positively impact the growing number of complex environmental challenges facing society.

Environmental Engineering is a branch of applied science that applies the principles of engineering, physics, chemistry, biology, ecology, and earth, ocean and atmospheric sciences to problems associated with the quality of air, land, water and living systems. The scope of Environmental Engineering includes: the provision of a safe and potable water supply and adequate sanitation, waste water management, air and water pollution control, contaminated soil remediation, contaminant transport, recycling, resource recovery, environmental assessment and environmental law. Environmental Engineers design and manage processes and products that minimize or eliminate pollution, protect human health, and promote sustainability and ecosystem health, without sacrificing economic viability and efficiency.

In British Columbia, Canada, and internationally, the demand for Environmental Engineers from Federal, Indigenous, Provincial and Municipal government agencies, manufacturing and treatment plants, resource industries and consulting firms, and the resulting establishment of Environmental Engineering programs, has been increasing exponentially for several decades. At most universities, Environmental Engineering programs have either a strong Civil Engineering focus or a strong Chemical Engineering focus. As one of the few universities with truly world class expertise in both disciplines, we are able to offer a program that will be unique in its breadth of coverage of Environmental Engineering. The program also leverages UBC's strengths in the many related disciplines that are crucial to the training of Environmental Engineers.

### **Credential**

The credential awarded will be the Bachelor of Applied Science (B.A.Sc.) in Environmental Engineering. The program is designed to be accredited by the Canadian Engineering Accreditation Board (CEAB).

### **Location**

The Vancouver Campus of UBC is the main location for classroom education and administration. Students meeting published academic requirements will be eligible for the Co-operative Education Program as well as either *Go Global* or *Coordinated International Exchange* opportunities. These educational experiences offer students the opportunity to work and/or study in a variety of locations both domestically and internationally.

### **Faculty Offering Program**

The program will be offered and administered by the Faculty of Applied Science, UBC. Course instruction will be primarily through the Faculty of Applied Science with some courses being delivered by the Faculty of Science.

**Program Start Date**

The program will be offered in the 2020-2021 academic year, beginning in September 2020. Note that students entering the UBCV B.A.Sc. common first year program in September 2019 will be eligible to apply for year 2 of the Environmental Engineering program in term 2 of their first year.

**Program Completion Time**

Anticipated time for completion of the 147 Credit program is 4 years of full-time academic study. Participation in the Applied Science Co-op program, exchange programs, or the addition of Minor programs to the degree may extend the duration of study. Students may study part-time with the approval of the program director and the Dean of Applied Science.

**Goals of the Program**

By offering a unique blend of perspectives from Civil Engineering and Chemical and Biological Engineering, a spine of Environmental Engineering community-based project courses, as well as broad training in governance, ecology, and public health, the proposed Environmental Engineering program aims to prepare students to design, operate, maintain, and decommission urban, agricultural and industrial processes that improve ecosystem services particularly as these processes relate to air, water, and soil quality. In so doing, the program will be a strong contributor to the ability of B.C., Canada, and the international community to successfully address current and future challenges in Environmental Engineering. It aims to foster UBC's emergence as a leader for Environmental Engineering education and further advance our reputation and capacity in Environmental Engineering research.

**Contribution to UBC's Mandate and Strategic Plan**

The proposed program exemplifies many aspects of UBC's recently developed strategic plan entitled *Shaping UBC's Next Century*, including:

- **Collaboration: Advancing purposeful, coordinated action within and across disciplines, campuses and the broader community**
- **Innovation: Cultivating creativity, resilience and shared risk-taking**
- **Strategy 12: Program Redesign**
- **Strategy 13: Practical Learning**
- **Strategy 14: Interdisciplinary Learning**

The proposed program of study also manifests the strategic plan's core area entitled "People and Places" particularly as this area relates to UBC's 20-Year Sustainability Strategy.

**Delivery Methods**

Required and elective courses support the student's development of core concepts, skills and graduate attributes in Environmental Engineering. Courses include traditional, online and "mixed" instruction, laboratory and design work. In a final Capstone project, students create a design relating to a multi-scale, ill-structured Environmental Engineering problem under the mentorship of university and/or industry experts. An important option in the program includes 4 terms (4 months each) of relevant work experience coordinated through the Applied Science Co-op Program. Eligible students may participate in the *Coordinated International Experience* Exchange program for opportunities for internships and/or study internationally.

**Program Learning Outcomes**

Graduates of the ENVE program will be able to synthesize and integrate the fundamental principles of the natural sciences in order to explore possible solutions to Environmental Engineering problems and apply appropriate quantitative and qualitative investigative techniques to large complex Environmental Engineering problems in order to provide substantive recommendations. Each will exhibit the highest quality values, attitudes and skills related to professionalism and personal development, including effective communication of evidence-based recommendations, ethics and equity considerations, behaviours and attitudes enabling Indigenous engagement, life-long-learning, accountability and more. Each will exhibit and meaningfully acknowledge the contextual issues surrounding their work. They will feel comfortable and be effective within multi, inter, and transdisciplinary teams. They will knowledgeably apply an array of technical and organizational decision-making tools and techniques. Finally, they will be able to create innovative design solutions to complex, multi-layered, ill-structured Environmental Engineering challenges. More details on program learning outcomes are available in section 2.3.3 of this proposal.

### **Linking Learning Outcomes and Curriculum Design**

The required and elective courses in the program have been carefully chosen to ensure a robust and streamlined learning experience centered on the program learning outcomes. The scope of the learning outcomes is broad and many educational experiences are designed to ensure they are met. Co-operative work placements are an important option in this program. The capstone project brings the course-work and practical learning together to demonstrate that key Program Learning Outcomes are achieved.

### **Program Strengths**

The program offers a comprehensive curriculum grounded in foundational principles of engineering science. The program was developed by drawing upon Environmental Engineering expertise within Applied Science in Chemical and Biological Engineering, Civil Engineering and Mining Engineering. Consultations with colleagues in the Institute for Resources, Environment, and Sustainability, Earth, Ocean and Atmospheric Sciences, Biology, Microbiology, and other units on campus, as well as with students, the engineering consulting industry in British Columbia, and government agencies were also used to shape this proposal. In addition, the program includes aspects of professional development such as ethics and equity training, workplace safety, training in communications, and opportunities for electives in humanities. In addition to graduating from an accredited engineering program leading to careers in industry and entrepreneurship, students in the program will be well prepared for graduate studies.

### **Related Undergraduate Programs at UBC or other BC Post-secondary Institutions**

The growing need for Environmental Engineers in British Columbia (see market analysis in section 2 of this proposal), is currently partially addressed by a jointly administered UBC/UNBC environmental program (see section 2.5). In addition to continuing to offer the joint program, both UBC and UNBC propose to establish stand-alone programs to help meet the demand for Environmental Engineers and to provide prospective Environmental Engineers a broader range of options.

### **Institutional Contact**

University of British Columbia

Faculty of Applied Science

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## **APPENDIX A: Appendix to the Executive Summary (for internal UBC purposes only)**

### **Budget and Funding**

A financial model for the proposed program has been prepared by the Faculty of Applied Science and reviewed by the Provost Office. The model outlines how the current program may be offered within the existing resources available to the two contributing Departments, Civil and Chemical and Biological Engineering.

This program will follow the same tuition model as other existing UBCV B.A.Sc. programs. These programs assess tuition on a per-credit basis. Current rates are published on the UBC website: <http://students.ubc.ca/enrolment/finances/tuition/undergraduate-tuition-fees>. See section 8 of this proposal for tuition and fee assessment details.

This program will share the common first year of our existing Vancouver-based B.A.Sc. programs. Additionally, a number of the courses for the ENVE program, both core and elective, will be pre-existing courses. Six new ENVE courses are being proposed within this proposal. Syllabi for these courses are included in section 5.b of this proposal.

Additional resources are required to manage and provide this program. These resources, which relate to teaching and learning space and faculty, are presented in section 3 of this proposal.

### **Space Requirements**

The proposed ENVE program will not impact the total number of engineering students studying at UBC, within the Departments of Civil Engineering (CIVL) and Chemical and Biological Engineering (CHBE). In the short-term, the current Departments have adequate laboratory and teaching spaces which will be used more intensely in order to accommodate the six new and innovative courses which are proposed as part of the program (i.e. ENVE 200, 201, 202, 203, 301, and 401). Over the medium-term the Faculty as a whole will be reviewing all our space to identify how space use can be optimized for the delivery of all our programs. Over the long-term, the Faculty wishes to pursue the development of a new “Applied One” building which will provide additional teaching and learning spaces to accommodate recent and expected growth in the Faculty.

### **Library**

The new courses for this program have been reviewed by the library and the signed Library consultation form is included in section 7 of this proposal. The courses requiring new resources will be funded by the APSC Dean’s Office and the departments of Civil Engineering and Chemical and Biological Engineering.

## 1. Introduction

Environmental Engineering is a broad field involving the application of engineering principles to support the health of natural systems, and provide healthy land, water and air for habitation. It involves soil, water and air pollution control within urban, agricultural, and industrial settings, and ensures effective recycling, waste disposal, and remediation of polluted sites. Environmental Engineering is the only engineering discipline whose primary function is to support the environment at every scale: from site-specific concerns, to the management of drainage basins, and from the design of treatment facilities, to modelling future impacts, to informing the development of environmental policies. Its application dates back to Roman times with the construction of aqueducts to prevent droughts and ensure clean water. Today, countries, law-makers, citizens' groups and industries have a heightened awareness and concern for how decisions and actions affect the environment. Therefore, the field is growing in size and influence. Environmental Engineers work carefully with corporations, law-makers and others, employing sound principles and sustainable processes at a variety of scales, in order to protect the future of our air, land and water resources. (See Appendix 9.1 for a detailed description of the tasks performed by Environmental Engineers and the characteristics of the discipline.)

The University of British Columbia's Faculty of Applied Science acknowledges the critical need for Environmental Engineering training in Canada and, in this proposal, defines a new program aimed at advancing British Columbia's strong contribution to, and influence in, the growing field of Environmental Engineering (ENVE).

The proposal starts with offering a rationale for the new undergraduate program including a thorough market analysis outlining the future need for individuals trained in this critical discipline, a description of the proposed program, how this new program will contribute to UBC achieving its mandate, a comparison between the new program and other environmental programs offered within British Columbia, and a description of the students interested in taking the program. Section three presents the resources required to offer the program, reviewing budgetary, space, library, and teaching needs. Sections four and five provide the calendar change forms required to initiate the new program, and sections six and seven present results from the consultations that have been performed across the UBCV campus with other academic units, the library and with students, during which the proposal committee received valuable feedback. Finally, the proposal ends with section eight which describes the budgetary impacts of the new program.

It is recognized widely that engineers serve society across a wide range of economic sectors, and that increasing numbers of engineering graduates are needed by the province to assure its economic growth and maintain its high quality of life. Such growth inevitably requires the expertise of highly skilled Environmental Engineers able to work with an array of disciplines and perspectives. The proposal offered here aims to address this present and future need.

## **2. Program Rationale**

### **2.1. Introduction**

The rationale for the proposed ENVE program is compelling. Market analysis and a summary of extensive consultations performed with representatives from local industries (Section 2.2) establish the growing demand for engineers trained in this field. The program details (Section 2.3), including its goals, program learning outcomes, courses required to graduate, admission requirements, and proposed management strategy, illustrate alignment between the proposed program and the growing demand for Environmental Engineering graduates, while Section 2.4 reviews the alignment between the proposed program and key aspects of UBC's strategic plan "Shaping UBC's Next Century". Also described below is the relationship between the proposed ENVE program and other, already established, Environmental Engineering programs in British Columbia (Section 2.5). The level of support and recognition from other post-secondary institutions (Section 2.6), and a description of the potential students targeted by the proposed program (Section 2.7) are also presented. Overall, continued human population growth in British Columbia coupled with increases in per-capita material consumption, as well as the information provided in this section, represent the rationale for a new ENVE program offered at UBCV.

### **2.2. Market Analysis**

#### **2.2.1. Market Research Approach**

To establish the viability of the proposed program, the following activities were undertaken:

1. Market research & concept development conducted through:
  - a. Multiple meetings of the inter-disciplinary ENVE Program Development Committee (See Appendix 9.3 for the roster of this committee).
  - b. Review of relevant recent labour market and industry reports.
  - c. Research on comparable programs in Canada and internationally.

2. Consultation and Validation by external sector experts

We consulted with, and received feedback from, many Professional Engineers working in the Environmental Engineering industry and within government. These include:

- Carol Campbell, Senior Project Manager, WSP
- Allan Gibb, VP – Wastewater Treatment, WSP
- Gerson Neiva, VP, Rural Infrastructure, WSP
- Negin Tousi, Water and Wastewater Engineer, WSP and BCWWA
- Claire Bayless, Project Manager, WSP
- Cristina Fonseca, Senior Process Engineer, Stantec
- Freda Leong, Manager, First Nations Infrastructure, Associated Engineering
- Clemente Miranda, Senior Environmental Engineer, Teck Resources
- Wayne Wong, Senior Process Engineer, AECOM Engineering
- Paul Kadota, Program Manager, Utility Research & Innovation, Metro Vancouver
- Troy Vassos, Technical Director, Integrated Sustainable Water Management Consultants

- Nezam Mazloomi, Associate and Senior Project Manager, David Nairne and Associates
- Irfan Gehlen, Water Supply & Treatment Sector Leader, Principal, Kerr Wood Leidal Consulting Engineers
- Maureen Long, Municipal Infrastructure EIT, David Nairne and Associates
- Mahdi Bazri, Project Manager, Envirochem, Water & Wastewater Treatment

### **2.2.2. Market Analysis**

Environmental Engineering is often considered a specialization of Civil Engineering and typically reported under the NOC code 2131. However, from extensive discussions with industry (for examples, see the above list), we know that graduates from our program may be hired into a variety of jobs that may not be classified as Civil Engineering. For example, environmental engineers are employed by industrial sectors to inspect manufacturing and processing facilities (e.g. pulp and paper plants) and to design industrial waste-water treatment plants. Therefore, a broader search was conducted to look at additional opportunities for environmental engineering, and the following five NOC codes were identified as offering employment opportunities for graduates of the Environmental Engineering graduate program; Civil Engineers (2131), Chemical Engineers (2134), Inspectors - Environmental Health and Occupational Safety (2263), Professional and Business Management consultants (1122) and Social Policy Researchers (4164). Reviewing the 2018 BC Labour Market Outlook there are a total of 12,390 jobs predicted over the next 10 years within these five target NOC codes. Using a conservative estimate and assuming that our graduates would be eligible for between 10 – 20% of the available jobs within these NOC codes we would estimate a total of 120 – 240 jobs per year for graduates from this program. To validate this estimate a review of existing 30 day job postings on Indeed.com using the keyword “Environmental Engineer” was conducted in April 2019. Of the total 162 postings returned, 101 of the postings were reviewed in depth. After review, 21 of the 101 postings were deemed to be suitable for graduates of the environmental engineering program, corroborating the estimate above, for future job openings. Currently the UNBC/UBC program graduates about 40 environmental engineers annually and the proposed UBC program will graduate another 40 students for a total of approximately 80 students graduating with environmental engineering degrees in British Columbia annually. With the recent approval for UNBC to establish their own independent environmental engineering program, it is anticipated these three programs will annually graduate approximately 120 environmental engineers, which is in line with the estimated number of job openings in this field, while still allowing for additional jobs to be filled through immigration.

Data provided by the Province under the Work BC program, indicates that within the two main NOC codes, representing jobs for Civil and Chemical Engineers there is expected employment growth between 8.7% and 6.6%, respectively, between 2022 – 2027. Additionally, across all of the NOC codes evaluated, the majority of the predicted job openings within these areas will arise from replacement (between 59 – 70%), indicating the importance of ensuring that we are providing the graduates necessary to help fill these roles as our aging workforce leaves the job market, and



as the predicted sectoral growth is realized. A comparison to the US Bureau of Labor and Statistics occupational handbook shows a similar projected labor market growth of 8% from 2016 – 2026.

The average provincial median salary across the five NOC codes reviewed range from \$62,500 - \$81,600 per year, which is on average 25% higher than the current BC Annual medial salary of \$54,800.

### **2.2.3. Market Insights**

#### **Insights from Industry Consultations**

Industry consultation provided the following curricular insights and feedback:

- The program is needed and important to the BC economy
- Capitalize on the passion of the students to develop leaders
- Ensure students get broad exposure and understanding of various related subject matters and disciplines so they can communicate and work with various types of engineers and scientists
- Be clear about the lab content of the program: lab work is important
- Be clear if there is field-work and experiential learning. Field surveys, construction management, site assessment experiences would be valuable. Employers want experience with those skills and BCIT graduates will compete with UBC graduates favourably in that regard
- Skills such as surveying, CADD and GIS are valuable
- Ensure that the workload isn't too heavy and the program doesn't try to cover too much in a course
- More technical electives would allow more focus on an area of interest
- Combining some existing courses may make more room for other courses in, for example, risk assessment, toxicology, public health
- Consider a mentorship opportunity
- An Environmental Engineering specific economics course would be valuable
- Maintain and support UBC's strong history of innovation
- Be sure to identify how this program is different from other programs and what its vision is
- Employers want engineers who are visionaries
- Design opportunities make this program stand out, Consider 'real-world' deliverable design projects
- There is a strong need in industry for air quality related skills, more courses on air would be valuable
- Consider maximizing 'touch points' with industry

All the participants in the consultation session and those responding in writing indicated their desire to hire the graduates from the Environmental Engineering program. The specific comments

and feedback on the curriculum were provided as a way to ensure the program offers the best possible educational and training opportunity for the students and prepares them for the job market. Any such suggestions, which were not already included in the program, have been incorporated and the curriculum and course syllabi have been adjusted accordingly.

### **Predicted British Columbia economy and employment growth**

The current BC government was elected based on a platform “..... to create tens of thousands of new, sustainable, permanent jobs, while reducing BC’s climate change emissions and growing the low carbon economy..”. They promised to develop a sustainable economy that includes “Protecting our environment and taking action on climate change...” with a major mandate stated as “Protecting our air, land and water, creating jobs”. This will require an increase in training of highly qualified Environmental Engineers to participate in a growing innovation sector to develop new technologies for both environmental protection and support of healthy ecosystems. All industrial sectors (for example, pulp & paper, mining, and oil & gas) will be required to shift towards greater environmental stewardship, which will increase the demand for Environmental Engineers involved in water, residuals and energy reduction, management, and reuse. The government promised to make environmental decisions that BC residents can trust, which will require expansion of environmental impact assessments that are often performed by Environmental Engineers.

#### **2.2.4. Potential Sectors of Employment for Graduates**

##### *1. Environmental consulting firms*

British Columbia is the base for many renowned environmental consulting firms that work throughout the World. One hundred and twenty nine companies are members of the British Columbia Environment Industry Association (BCEIA). These include major international Companies such as Stantec Consulting Ltd., SNC Lavalin Inc., WSP, AECOM, Jacobs, Pottinger Gaherty Environmental Consultants Ltd., Hemmera (Ausenco), Klohn Crippen Berger Ltd., and Golder Associates Ltd., to mention just a few. These industries are involved in industrial waste management, remediation, environmental services, consulting, environmental risk analysis, water management and all aspects of environmental management and planning.

##### *2. Urban Municipalities*

The number of British Columbians living in urban centers is increasing. For instance the population of Metro Vancouver is expected to increase to 3.4 million by 2041, which will be 1.2 million more people than in 2006. Other urban populations increasing in size substantially, include Kelowna, Kamloops, Chilliwack, Squamish, Richmond, Abbotsford, Surrey, and Langley. (Moneysense, “Canada’s Fastest Growing Cities 2017”, July 4, 2017). To meet the demands of the new residents, there will be an increase in services including water supply, waste management, energy conservation & recovery, pollution reduction and remediation of

contaminated sites for construction. Environmental Engineers are key to implementation and management of these services.

### 3. *Extractive industries*

Major industry sectors in British Columbia include mining, forestry, natural gas, agrifoods, technology, transportation and tourism. More than 700 mining and mineral firms choose Vancouver as their base of global operations. The total value of mine production for 2017 was \$9.82 billion, which was an increase of \$3.19 billion over the 2016 estimate. Since this sector is expanding, and there is a mandate for more responsible mining, there will be an increasing need for Environmental Engineers to manage water, energy, residuals, waste and pollution at mines sites. British Columbia's forest industry contributed \$12.9 billion to the GDP in 2016, employing over 141 000 people directly or indirectly. The forestry industry intends to spend \$650 million per year over the next 5-10 years expanding their operations. There are opportunities for Environmental Engineers in reducing and managing energy and residuals at pulp & paper mills, creating innovative solutions for residual reuse, development of new biomass derived products, and reducing the environmental impact of forestry.

### 4. *Rural communities*

British Columbia is home to 198 First Nations, about one third of all First Nations in Canada. Many First Nations live in remote communities that do not receive services. Some of these experience drinking water advisories and do not have access to safe drinking water. The Canadian government has committed to supplying all of these communities with clean water by 2021. Furthermore, out of nearly 4800 water systems in the province of BC, nearly 4500 serve small and rural communities of less than 300 connections, and at any given time there are between 500 and 700 boil water advisories in those communities. Environmental Engineers are responsible for designing appropriate technologies for remote communities to supply them with safe drinking water and to treat their wastes to improve health and protect the environment.

## **2.3. Program Description and Specifications**

Environmental Engineering (ENVE) is a branch of applied science that contributes to the health of ecosystems and the provisioning of ecosystem services to people, by addressing problems associated with the quality of air, land, water and living systems. Its scope includes: the provision of a safe and potable water supply and adequate sanitation, waste water management, air pollution abatement, noise reduction, contaminated soil remediation, contaminant transport, material recycling, and environmental assessment and law. Specific tasks include: a) the design of facilities, management systems, and information systems; b) the performance of impact assessments (including regulatory, sustainability, environmental, social, and risk); c) sustainability planning and design, and; d) environmental policy formulation. ENVE is aligned with, but substantially different from, clean or sustainable energy engineering programs which prepare students to work in the energy sector of the economy.

In essence the practice of Environmental Engineering exists at the knowledge nexus of environmental science and ecology, engineering science and techniques, and an informed understanding of the interactions between human activities and natural systems (see Fig. 1 below). Appendix 9.1 provides a list of Environmental Engineering areas of practice.

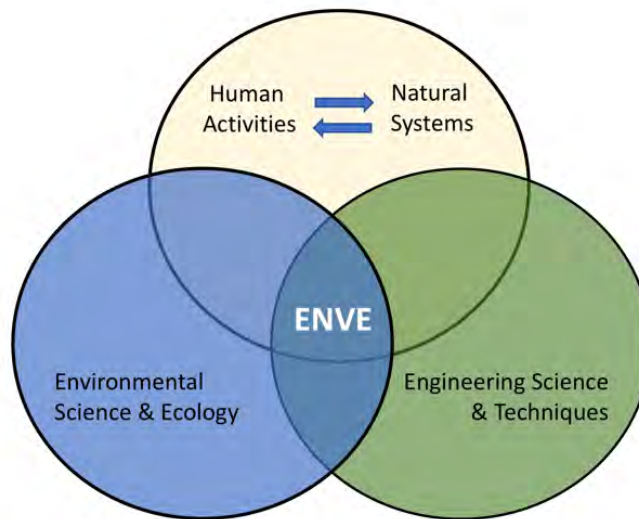


Figure 1. Integrated knowledge of ecology & environmental science, engineering science and technologies, and an informed understanding of the interactions between human activities (social, economic, industrial, built infrastructure, etc.) and natural systems is needed in the practice of Environmental Engineering (ENVE).

The 4-year full time, 147 (148) credit<sup>1</sup>, Vancouver program offered by the Faculty of Applied Science, will enroll approximately 40 high-achieving international and domestic students annually. It is likely that most domestic students will come from the metro Vancouver area (because those from areas in the B.C. interior typically enroll in our joint UBC/UNBC Environmental Engineering program). Most students will be direct-entry from high-school; however, we also expect approximately 5 to 10% of our students to be mature learners with employment experience, as is the case for our current enrolment in all engineering fields.

The curriculum is modeled after top-ranked programs at other institutions and aligns with international recommendations for Environmental Engineering programs<sup>2</sup>. It is grounded in strong engineering foundations and systems complexity, collaborative community projects and a reciprocal, experiential learning environment created between students and stakeholders. The program is designed for accreditation by the Canadian Engineering Accreditation Board (CEAB) and graduates will be eligible for Professional Engineering (P.Eng.) status through EGBC.

<sup>1</sup> In some years of the program, students will be offered constrained choice for core courses. Thus, as with other programs offered by APSC, ENVE students will graduate with either 147 or 148 credits.

<sup>2</sup> For instance, see Dowling, D., and Hadgraft, R. (2013). A Graduate Capability Framework for Environmental Engineering Degree Programs: A Guide for Australian Universities. Office for Learning and Teaching, Department of Industry, Innovation, Science, Research and Tertiary Education. Sydney

### 2.3.1. Mission

The proposed Environmental Engineering undergraduate program will address British Columbia's growing need for high-quality Environmental Engineers and contribute to continual improvements in best-practice environmental performance within the province, by offering a world-class, unique, and progressive CEAB accredited education experience to the next generation of Environmental Engineers.

### 2.3.2. Goals of the Proposed Program

The program will

- Equip engineers with critical thinking and practical skills which will allow them to help address current and future issues in Environmental Engineering in BC, Canada and abroad
- Support UBC's emergence as a leader in the education of Environmental Engineers and further advance our reputation and capacity in Environmental Engineering research
- Provide students with fluency and selected skills relating to urban, rural, industrial, and natural systems
- Prepare students to design, operate, maintain, and decommission urban, agricultural, and industrial processes that improve ecosystem services, particularly as they relate to air, water, and soil quality
- Offer students breadth in the areas of law, policy, governance, ecology and public health, thereby positioning graduates with the skill-set necessary to positively influence environmental legislation; and
- Provide students with a unique blend of content delivered from the perspectives of Civil Engineering and Chemical and Biological Engineering, in conjunction with a learning spine of ENVE-focussed, world-class, hands-on experiences through labs and fieldwork, including community-based engagement.

### 2.3.3 Program Learning Outcomes

Graduates of the Environmental Engineering program will demonstrate high levels of:

#### *Environmental Engineering Science Knowledge;*

Graduates will be able to:

- synthesize and integrate the fundamental principles of the natural sciences including ecology, that underlay engineering and the bio-physical environment, in order to formulate, model, and explore solutions to, Environmental Engineering problems;
- investigate complex, sometimes ill-structured and multi-layered, Environmental Engineering problems via experimentation, analysis and interpretation of both quantitative and qualitative data, in order to provide substantiated conclusions and recommendations.

#### *Environmental Engineering Professionalism;*

Graduates will be able to:

- communicate evidence-based decisions and recommendations using argumentation and

accessible language;

- where appropriate, inform engineering decisions of the rights of Indigenous peoples as described by the United Nations, and foster collaborative relationships with Indigenous communities;
- exhibit and communicate effectively the highest standards of ethics, equity, accountability, integrity, health and safety, social awareness and other aspects of professionalism, and support and contribute to multi, inter, and transdisciplinary teams that address large, multi-scaled, ill-structured problems relating to Environmental Engineering, by using respectful, empathic, inclusive behaviour and language;
- cultivate personal and professional development of the mental habits of life-long-learning, including motivation, metacognition, knowledge creation and dissemination, adaptive leadership, and awareness and respect for different perspectives and intellectual constructs.

#### *Design and Decision-making;*

Graduates will be able to:

- use, modify, and extend a variety of appropriately selected Environmental Engineering decision support tools in order to provide substantiated conclusions and recommendations;
- with an awareness of their limitations, apply sustainability, economic and project management techniques in an Environmental Engineering context, including those relating to risk analysis, organizational change management, and decision-making;
- enact appropriate solutions, evaluation metrics and validation methods used in Environmental Engineering to create detailed designs for natural and built civic, agricultural, and industrial infrastructure that supports ecosystem health, particularly as the infrastructure relates to air, water, soil, and living systems.

### **2.3.4. Program Degree Requirements**

Courses in the required 147 (148) credit curriculum are listed in Table 1.

Table 1. UBC Courses in the Proposed ENVE Undergraduate Program

Year 1		Year 2	
APSC 100*	Introduction to Engineering I	CHBE 241	Material and Energy Balances
ENGL 112	Strategies for University Writing	CIVL 204	Fundamentals of Environmental Engineering
MATH 100	Differential calculus	CIVL 215	Fluid Mechanics
MATH 101	Integral calculus	ENVE 200 <sup>P</sup>	Environmental Engineering Design and Decision Making
PHYS 157	Introductory Physics for engineers I	MATH 253	Multivariate calculus
PHYS 159*	Introductory Physics Laboratory for engineers	CHBE 244	Chemical and Biological Engineering Thermodynamics I
APSC 101*	Introduction to Engineering II	ENVE 202*	Environmental Engineering Science

APSC 160	Introduction to Computer engineering design	ENVE 203 <sup>p</sup>	Environmental Engineering and Sustainability
CHEM 154*	Chemistry for Engineering	ENVE 201	Technical Communications for Environmental Engineering
1 Comp.Studies	Humanities and SS	MATH 256	Differential equations
MATH 152	Linear Systems	STAT 251	Elementary statistics
PHYS 158	Introductory Physics for engineers II		
PHYS 170	Mechanics I		
<b>Year 3</b>		<b>Year 4</b>	
CHBE 230	Computational Methods	CHBE 459 or CIVL 403	Chemical and Biological Engineering Economics or Civil Engineering Economics
CHBE 364* or CIVL 407*	Environmental Laboratory	CHBE 483	Energy Engineering
CHBE 373 or CIVL 406	Water Pollution Control	CIVL 416	Environmental Hydraulics
CIVL 315*	Fluid Mechanics II	ENVE 401 <sup>p</sup>	Environmental Engineering Capstone Project (term 1)
ENVE 301 <sup>p</sup>	Environmental Engineering Intermediate Design Project	EOSC 429	Groundwater Contamination
1 Comp.Studies	Humanities and SS	CHBE 486	Waste Management for Resource Recovery
CHBE 484	Green Engineering	CIVL 402	Professionalism and Law in Civil Engineering
CHBE 485	Air Pollution Prevention and Control	CIVL 409	Municipal Engineering
CIVL 305	Introduction to Environmental Engineering	ENVE 401 <sup>p</sup>	Environmental Engineering Capstone Project (term 2)
CIVL 316*	Hydrology and Open Channel Flow	MINE 486	Mining and the Environment
CIVL 408	Geo-Environmental Engineering	2 Tech Elec.s	Technical electives
EOSC 329*	Groundwater Hydrology		

\*laboratory courses

<sup>p</sup>project courses

### 2.3.5. Admission Requirements

Students are admitted to engineering at UBC into a common first year program. Admission requirements for the UBCV ENVE Program will be the same as the admission requirements for all other direct-entry engineering programs at the UBCV campus. For reference, the existing calendar text is available at the following link:

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,195,272,28>.

Resources have been committed by APSC to commence the program with a 20-student pilot cohort. The program is intended to grow to an annual cohort of 40 students over a 3 year start-up phase. Starting in the spring of 2020, students finishing the first year of their common engineering courses submit a *Preference Form* in which they indicate and prioritize the engineering programs

they would like to study for the remainder of their degree. Students are encouraged to rank their preference for all programs and are notified that if they choose to limit their preferences and are not placed in a program that they have identified on their preference form, it will be assumed that they will not be continuing in UBC Engineering. Additional details of this process and FAQs can be found on the engineering website at <http://students.engineering.ubc.ca/enrolment/placement/?login>.

We will add the ENVE program as an alternative for first year students to select as their second year program of choice, starting in the spring of 2020. We will select students to the pilot program according to the same processes outlined for the other programs. Students are not limited in the number of placements to which they can apply. The program will not launch unless and until it has Ministry approval and sufficient resources are committed.

Note that we are not requesting an increase in enrollment allocation to UBCV's Faculty of Applied Science. It is anticipated that students entering the ENVE program in their second year will result in fewer students enrolled in both the Civil Engineering and the Chemical and Biological Engineering programs.

### **2.3.6. Program Management and Assessment**

The program will be situated in the APSC faculty, with its administration jointly managed by the departments of Chemical & Biological Engineering and Civil Engineering. The new ENVE courses proposed here, consist of content and pedagogies that align with the expertise available within these two departments and, similarly, both departments have adequate capacity in terms of the required teaching environments (e.g., laboratories, project team work space, and classrooms). The program will be led by co-directors, one from each department, who, together, will oversee all aspects of the program. Professors Madjid Mohseni and Gregory Lawrence, of Chemical & Biological Engineering and Civil Engineering, respectively, whom together have championed the program development, will likely take these positions.

ENVE 200, 301, and 401 (13 credits total) comprise the integrative, design-based, core courses in the proposed program. While a primary faculty member will be assigned to each of these courses, each will be co-taught by a team of CIVL and CHBE faculty members. The CIVL and CHBE departments, in coordination with the program co-directors, will be responsible for ensuring these courses are supported. Three other new ENVE courses are proposed, namely ENVE 201 (entitled Technical Writing for Environmental Engineering), ENVE 202 (Environmental Engineering Science), and ENVE 203 (Environmental Engineering and Sustainability). These are also integrative courses. With a focus on creating several significant second year Environmental Engineering experiences, the new program provides strong Environmental Engineering foundations, enabling students to then construct knowledge relating to other perspectives (for example chemical and biological engineering, and civil engineering) in subsequent years of study.



All engineering programs at UBC have either an Industrial Advisory Committee (IAC) or a Board of Study. The ENVE program will have both. The Board of Study will be comprised of the Directors and all faculty involved in delivering the core courses in ENVE. The Board of Study will meet each semester. The IAC will consist of industry representatives, the Directors and other faculty representatives, a student representative and a representative of the APSC Dean. The IAC will meet annually to review all aspects of the program. As the program becomes established the two committees may merge.

In addition to the IAC, this program is designed to conform to the accreditation standards of the Canadian Engineering Accreditation Board (CEAB). As such, an accreditation site visit will occur during the fall of the year during which the first cohort is scheduled to graduate and at least every 6 years thereafter.

## **2.4. Contribution to UBC Mandate and Strategic Plan**

The ENVE program will offer an exceptional learning environment for students and will attract students from around the world to study in Vancouver's diverse environment. The program's comprehensive curriculum draws upon the combined expertise of faculty in biological and chemical engineering and in civil engineering. Through optional work placements and consecutive real-project-based courses, the program supports transformative and relevant learning opportunities. The program synthesizes theory and practice through challenging learning experiences that equip students with the attitudes, skills and knowledge needed to excel as Environmental Engineers, contributing to improvements in best-practice environmental performance within the province and beyond. Some key aspects of *Shaping UBC's Next Century*, UBC's new strategic plan, that align with the proposed program are:

**People and Places Collaborations Theme: Advancing purposeful, coordinated action within and across disciplines, campuses and the broader community, to address the challenges and opportunities facing society**

*"There are real opportunities to make a difference, both within and across traditional disciplines."*

*"...providing students the latitude they need to navigate their interests and aptitudes."*

The program is specifically designed to develop engineers who can collaborate to address current and future challenges related to engineering and the environment across traditional disciplinary boundaries and industries. All industrial, agricultural, and municipal sectors are shifting toward greater environmental stewardship. Therefore, Environmental Engineers with training across disciplines and with real and relevant experience, and with strong collaborative skills, will be well positioned to address the changes and challenges as these shifts occur.

**People and Places Innovation Theme: Cultivating creativity, resilience and shared risk-taking that catalyzes new approaches within the university and beyond**

*“...must extend beyond the traditional domains of science and engineering; and must support constructive engagement with industry and community partners.”*

*“...we must ensure that our efforts in innovation remain purposeful, connected and enduring.... they must support constructive engagement with partners beyond the academy.”*

As environmental impacts and issues become more central in the public eye, and as governments (local, provincial, Indigenous, and national), institutions, and industries respond to the public demand for greater environmental stewardship, the need for leadership and innovative practice becomes more acute. Through a cross-disciplinary curriculum, engagement with industry and other community partners, and a focus on critical thinking and design, this program aims to develop engineers who know how to design innovative solutions drawing from varied perspectives and approaches.

**People and Places Strategy 12. Program Redesign: Reframe undergraduate academic program design in terms of learning outcomes and competences**

*“We will move toward using learning outcomes as a primary organizing principle of program structure and completion. This approach will better engage student curiosity and initiative: it allows for a more individualized approach, supporting learning with clearer feedback to help students focus on competencies they have yet to master.”*

An ENVE curriculum map is key to the alignment between the program learning outcomes and specific course learning objectives and activities. Also, alignment of course objectives, activities and learning assessments is core to ENVE course development activities. Finally, program assessment and continual improvement is envisioned via the period collection of indicator data which will be interpreted to inform subsequent program improvements.

**People and Places Strategy 13. Practical Learning: Expand experiential, work-integrated and extended learning opportunities for students and alumni**

*“We will work with industry and community partners to expand experiential learning – ‘learning by doing’”*

Practical learning is at the heart of the ENVE program. It is manifest most intensely in three areas: a) substantial laboratory in core courses; b) 3 semesters of ENVE design courses specifically intending to give student teams expanded opportunities to plan and execute their own practical, potentially field-based, projects, inspired by real-life industry needs; and c) an option for 20-months of cooperative workplace experience within industry.

**People and Places Strategy 14. Interdisciplinary Learning: Facilitate the development of interdisciplinary, problem-focused learning**

*“We will develop programs and courses that foster and support undergraduate students from different perspectives and traditional disciplines to work together on complex or emergent challenges.”*

*“Students develop expert thinking faster when they are given well-designed opportunities to integrate concepts they have learned across several courses to tackle new, larger issues and problems. When students across a range of programs work together, the result is a rich, high level learning experience that builds expertise in ways no individual, discipline-based course can achieve.”*

The program was developed inter-professionally and is designed specifically to foster and support interdisciplinary, team-based and problem-focused learning. The project courses are problem-focused and challenge teams of students to collaborate and integrate the knowledge and skills they have developed across their learning, in order to create innovative solutions.

**Core Area #1 in the UBC Strategic Plan is *People and Places*.** Within area #1, UBC explains that it “is regarded as a leader in sustainability, with a long track record of innovative practices and programs” (p. 39). It further claims that “the challenges around climate change are ever more complex, and the stakes are high. We need to intensify our academic and operational efforts” (p. 40). In its 2014 *20-Year Sustainability Strategy*, UBC lists one of its strategic goals thus:

*“UBC is a preferred destination for undergraduate and graduate students, postdoctoral fellows, visiting scholars, and professionals who wish to develop trans-disciplinary or more specialized skills in sustainability”*

And yet, currently, UBC does not offer a self-contained full 4-year undergraduate degree in Environmental Engineering. The proposed program, which includes a strong emphasis on sustainability, will help UBC address these high-stake challenges, enhance its reputation as a leader in the field, and attract students who wish to study and practice as engineers in ways that promote sustainability and environmentally-friendly industrial, extraction and governmental practice.

## **2.5. Relationship to Established Programs**

At present, the joint UNBC/UBC Environmental Engineering Program is the only Bachelor of Applied Science program in Environmental Engineering offered in British Columbia. The program is accredited by the Canadian Engineering Accreditation Board and graduates are eligible for registration as Professional Engineers in British Columbia. Since 2002 the joint four and a half year program has been offered collaboratively between the University of Northern British Columbia (UNBC) and the University of British Columbia (UBC). In its first two years the students develop a foundation in mathematics, biology, chemistry, and environmental science, through study within the College of Science and Management at UNBC. In their third and fourth years, students transfer to UBC where they gain a thorough, hands-on understanding of engineering fundamentals, analysis and design, primarily through courses in Civil Engineering and

Chemical and Biological Engineering. Students complete their degree with a final term at UNBC where they focus on practical Environmental Engineering design problems.

The demand for Environmental Engineers in British Columbia is much greater than the number of students who graduate from the joint program each year (which is between 30 and 40 students). The joint program has always been perceived as a first step in the evolution of undergraduate Environmental Engineering training in British Columbia. In addition to continuing to offer the joint program, both UBC and UNBC propose to establish stand-alone programs to help meet the demand for Environmental Engineers and to provide prospective Environmental Engineers a broader range of options. While many students thrive on the opportunity to move back and forward between Prince George and Vancouver, not all do. Others prefer a four-year program rather than the four and a half year joint program. While application pressure for the joint program is high from students in the Prince George region, few students from the lower mainland apply to the joint program. There is a pent up demand for a stand-alone four-year undergraduate Environmental Engineering program at UBCV.

Besides being a four-year stand-alone program, the proposed program at UBCV will differ in several ways from the existing joint program. For example, while no new courses were developed at UBCV for the joint program, six new courses are specifically tailored for the Environmental Engineering program proposed here. These courses take advantage of the large number of faculty in the Departments of Civil Engineering and Chemical and Biological Engineering at UBCV who are actively involved in the diverse range of subjects that comprise the field of Environmental Engineering (see Appendix 9.2 for a list of these faculty members).

Please note that, while the proposed ENVE program at UBCV and the recently established undergraduate degree in Sustainable Energy Engineering (SEE) being offered by Simon Fraser University (SFU) are both focused on sustainability as it relates to engineering practice, the training offered by each program fills different needs. Fundamentally, the SEE program relates exclusively to engineering of energy systems, while, the ENVE program enables work on mitigating human impacts on water, air, soil, land and biological systems. Further, the proposed ENVE program recognizes that, increasingly, environmental engineers act as convenors who bring together diverse individuals to address large-scale, ill-structured and complex sustainability problems. So, while the ENVE program offers seven senior-level courses relating to mitigating human impacts on natural systems, the SEE program includes no such senior courses. And, while the proposed ENVE program includes one senior level course on sustainable energy technologies (i.e. CHBE 483: Energy Engineering), the SEE program offers ten courses related to power generation and energy systems. These foundational differences mean that the graduates from each program fill different employment needs, as is indicated by the different NOC codes associated with each program. Therefore, while complementary, the ENVE and the SEE programs address different needs for engineering expertise.

## 2.6. Level of support and recognition from other post-secondary institutions

UBC is well-recognized as one of the world's leading academic centers for Engineering. The ENVE program is designed to meet the accreditation standards of the Canadian Engineering Accreditation Board (CEAB). The Director of the UNBC/UBC joint Environmental Engineering program supports this proposal.

## 2.7. Target Students

ENVE students will be drawn from those who complete the first year engineering program at UBC-Vancouver campus. This cohort consists of high achieving students - for every seat in the program, there are at least 5 applicants. Further, at 32%, UBCV's first year engineering program has a strong representation of female students compared to other programs in Canada. However, UBC's Faculty of Applied Science aims to increase the proportion of women in the first year engineering cohort to 50% and, since, as shown in Figure 2 below, a higher proportion of female students are interested in Environmental Engineering compared to all other engineering fields except biosystems, offering the ENVE program may support the APSC Faculty's goal of increasing the proportion of women in undergraduate engineering programs.

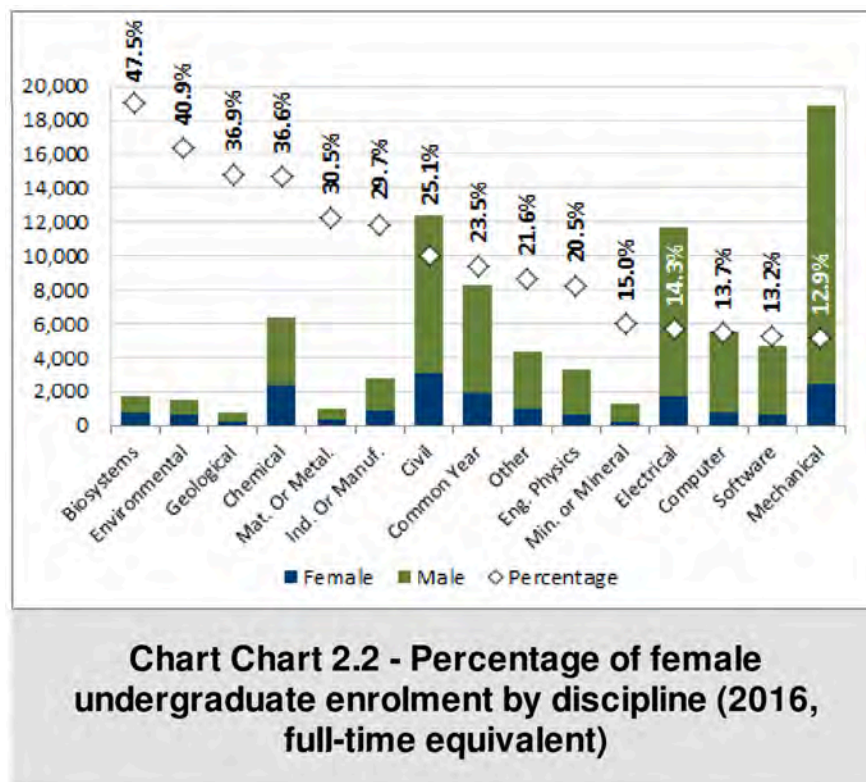


Figure 2. Chart 2.2 from an Engineers Canada Report illustrating the percentage of 2016 female undergraduate enrolment, by discipline, in Canada. (page 12 of the Engineers Canada Report entitled *Canadian Engineers for Tomorrow: Trends in Engineering Enrolment and Degrees Awarded 2016*.)

### **2.7.1. Enrolment Predictions and Capacity**

There is substantial demand for ENVE from within the existing UBC first year engineering population. Students enter the ENVE program in second year, where it is expected that twenty students will be enrolled in 2020. Subsequent years' enrollments will be capped at forty new second year students per year. We anticipate high application pressure, and no difficulty in reaching these targets.

### **2.7.2. Tuition Rationale**

Tuition for the ENVE program will be the same as for other UBCV engineering programs.

### **2.7.3. Scholarships**

Students in the ENVE program will have access to the same scholarship opportunities as other UBCV engineering students.

### **2.7.4. Opportunities for Further Study**

The ENVE program will prepare students for advanced research degrees in Environmental Engineering (i.e., Ph.D., M.A.Sc.) granted by top research intensive universities in Canada and across the world. Depending on the university where the B.A.Sc. students study, such degrees may be obtained within an array of different academic units, including Chemical and Biological Engineering, Civil Engineering, and Environmental Engineering Departments. UBC's B.A.Sc. degree in ENVE will also prepare students for one-year professional masters' degrees such as UBC's Masters of Engineering degree, Masters of Health Leadership and Policy, and Master of Engineering Leadership.

## **3. Program Resources**

### **3.1. Program Funding and Budget**

The need for program funding support arises from teaching costs associated with the six ENVE courses described in section 2.3.6. A financial model for the proposed program has been prepared by the Faculty of Applied Science and reviewed by the Provost Office. The model outlines how the current program may be offered within the existing resources available to the two contributing Departments, Civil and Chemical and Biological Engineering.

### **3.2. Space and Staffing Requirements**

The proposed ENVE program will not impact the total number of engineering students studying at UBC, and both CHBE and CIVL have adequate laboratory and teaching spaces which will be used more intensely in order to accommodate the six new and innovative courses which are proposed as part of the program (i.e. ENVE 200, 201, 202, 203, 301, and 401). Over the long-term, the program anticipates the construction of the "Applied Science One" building.

Teaching of the six proposed courses will be performed by CHBE and CIVL faculty members (see Appendix 9.2 for a list of faculty members with environmental engineering expertise).

### **3.3. Library Resources**

The program and its new courses were reviewed and approved by the library. Courses requiring new resources will be funded by the APSC Dean's Office.

### **3.4. Qualified Faculty**

UBC Engineering has faculty experienced, qualified and recognized as leaders in their fields. This includes the numerous faculty currently engaged in the core engineering courses that current students and ENVE students will take, as well as faculty with specific expertise related to Environmental Engineering. A non-exhaustive list of Faculty with expertise in ENVE is found in Appendix 9.2.

## **4. Calendar Curriculum Change Forms - Program & Course Code**

This section presents the calendar curriculum change forms relating to creating the new program and also creating the new ENVE course code.

**Category: 1**

<b>Faculty:</b> Applied Science <b>Departments:</b> Chemical & Biological Engineering and Civil Engineering <b>Faculty Approval Date:</b> Nov 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 2019 <b>Contact Person:</b> Gregory Lawrence <b>Phone</b> (604) 822-5371 <b>Email:</b> lawrence@civil.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>ENVE Environmental Engineering</b>	<b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course code  <b>Rationale for Proposed Change:</b> This subject code is needed to identify new courses specific to, and required for, the new (proposed) BASc in Environmental Engineering. This will differentiate these core program courses from both chemical and biological courses, and civil engineering courses.



**Category: 1**

<b>Faculty:</b> Applied Science <b>Departments:</b> Chemical & Biological Engineering and Civil Engineering <b>Faculty Approval Date:</b> Nov 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 2019 <b>Contact Person:</b> Gregory Lawrence <b>Phone</b> (604) 822-5371 <b>Email:</b> lawrence@civil.ubc.ca
Homepage >> Course Descriptions >> Courses by Faculty/School/College>> Faculty of Applied Science  <b>Proposed Calendar Entry:</b>  . . . ENPP     Engineering and Public Policy <b>ENVE     Environmental Engineering</b> GBPR     Green Bioproducts . . .	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;institution=2">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;institution=2</a> <b>Type of Action:</b> Adding new course code to Academic Calendar  <b>Rationale for Proposed Change:</b> A new course code for the ENVE program should be represented in the course codes. <b>Present Calendar Entry:</b>  . . . ENPP     Engineering and Public Policy GBPR     Green Bioproducts . . .

**Category: 1**

<b>Faculty:</b> Applied Science <b>Departments:</b> Chemical & Biological Engineering and Civil Engineering <b>Faculty Approval Date:</b> Nov 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 2019 <b>Contact Person:</b> Gregory Lawrence <b>Phone</b> (604) 822-5371 <b>Email:</b> lawrence@civil.ubc.ca
<p><b>URL:</b> Homepage&gt;&gt;Faculties, Colleges, and Schools &gt;&gt; The Faculty of Applied Science &gt;&gt; Bachelor of Applied Science&gt;&gt; Environmental Engineering</p> <p><b>Proposed Calendar Entry:</b></p> <p><b>Bachelor of Applied Science (B.A.Sc.) in ENVIRONMENTAL ENGINEERING</b></p> <p><b>Program Overview</b></p> <p>The Faculty of Applied Science offers a program leading to the Bachelor of Applied Science in Environmental Engineering (ENVE). Interested students are eligible to enter the ENVE program after completing the first year engineering program and should apply for the ENVE program during term 2 of the first year engineering program.</p> <p>The Mission of the ENVE program is to develop engineers possessing a combined analytical and open mind-set, who contribute to the health of ecosystems and the provisioning of ecosystem services to people, by addressing complex, often ill-structured, problems associated with the quality of air, land, water and living systems. The program is grounded in strong engineering foundations, an ecosystem approach to environmental engineering problems, collaborative community-focused projects and a reciprocal active-learning environment created between students, stakeholders, and instructors.</p> <p>Graduates of the UBC ENVE program will be uniquely qualified via training in both chemical, biological, and civil engineering to contribute to:</p> <p>a) the design of facilities, management systems,</p>	<p><b>URL:</b> N/A <i>[please create a calendar page]</i></p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> Create new undergraduate program page for Environmental Engineering in the Faculty of Applied Science</p> <p><b>Rationale for Proposed Change:</b></p> <p>The proposed environmental engineering undergraduate program will address British Columbia's growing need for high-quality environmental engineers and contribute to continual improvements in best-practice environmental performance within the province, by offering a world-class, unique, and progressive CEAB accredited education experience to the next generation of environmental engineer.</p> <p>The curriculum is modeled after top-ranked programs at other institutions and aligns with international recommendations for Environmental Engineering program. The program aims to establish UBC as a Canadian leader in a new approach to engineering education – one that embraces active, reciprocal learning in the context of community projects. It is designed to be accredited by the Canadian Engineering Accreditation Board (CEAB) and graduates will be eligible for Professional Engineering (P.Eng.) status through EGBC.</p>

and information systems associated with ensuring clean air, water and healthy living systems; b) the performance of impact assessments (including regulatory, sustainability, environmental, social, and risk); c) sustainability planning and design; and d) environmental policy formulation.

The UBC Environmental Engineering differs from, and is not compatible with, the Joint UNBC/UBC Environmental Engineering program. For information about the Joint UNBC/UBC Environmental Engineering program, see:

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,195,491,0>

Graduates from the UBC Environmental Engineering program will be eligible for Professional Engineering (P.Eng.) status in the field of their practice through EGBC.

### **Program Requirements**

#### **Second Year**

CHBE 241	3
CHBE 244	3
CIVL 204	3
CIVL 215	4
ENVE 200	4
ENVE 201	3
ENVE 202	4
ENVE 203	4
MATH 253	3
MATH 256	3
STAT 251	3
Total Credits	37

#### **Third Year**

CHBE 230	3
CHBE 364 or CIVL 407	2 or 3
CHBE 373 or CIVL 406	3

CHBE 484	3	
CHBE 485	3	
CIVL 305	3	
CIVL 315	4	
CIVL 316	4	
CIVL 408	3	
ENVE 301	3	
EOSC 329	3	
Complementary Studies Elective <sup>2</sup>	3	
Total Credits	37 or 38	
<b>Fourth Year</b>		
CHBE 459 or CIVL 403	3	
CHBE 483	3	
CHBE 486	3	
CIVL 402	3	
CIVL 409	3	
CIVL 416	3	
ENVE 401	6	
EOSC 429	3	
MINE 486	3	
Technical Electives <sup>1</sup>	6	
Total Credits	36	
<p>1. For a list of eligible Technical Electives, see the ENVE program website or speak to your academic advisor.</p> <p>2. For a list of eligible courses see degree requirements on the engineering website at <a href="http://students.engineering.ubc.ca/enrolment/degree-requirements/">http://students.engineering.ubc.ca/enrolment/degree-requirements/</a></p>		
<b>Cooperative Education Experiential Work Terms</b>		

<p>Cooperative education experiential learning placements are an important option within ENVE program. Work terms take place during the Winter and Summer terms, following the standard APSC COOP schedule. Students should refer to the program website for details. Students unable to complete one or more co-op terms should consult with the program advisor.</p> <p><b>Contact Information</b> The Faculty of Applied Science Dean's Office 5000-2332 Main Mall Vancouver, BC V6T 1Z4 <a href="http://www.apsc.ubc.ca">www.apsc.ubc.ca</a></p>	
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**Category: 1**

<p><b>Faculty:</b> Applied Science  <b>Departments:</b> Chemical &amp; Biological Engineering and Civil Engineering  <b>Faculty Approval Date:</b> Nov 8, 2018  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2019</p>	<p><b>Date:</b> September 2019  <b>Contact Person:</b> Gregory Lawrence  <b>Phone</b> (604) 822-5371  <b>Email:</b> lawrence@civil.ubc.ca</p>
<p><b>URL:</b> Homepage&gt;&gt;Faculties, Colleges, and Schools &gt;&gt; The Faculty of Applied Science &gt;&gt; Bachelor of Applied Science&gt;&gt; Introduction</p> <p><b>Proposed Calendar Entry:</b></p> <p><b>Introduction</b>  The Faculty offers programs of undergraduate study leading to the Bachelor of Applied Science in the following areas of engineering: Biomedical Engineering, Chemical Engineering, Chemical and Biological Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Physics, <b>Environmental Engineering</b>, Geological Engineering, Integrated Engineering, Materials Engineering, Mechanical Engineering, and Mining Engineering.</p> <p style="text-align: center;">.</p> <p style="text-align: center;">.</p> <p style="text-align: center;">.</p> <p>The Faculty of Applied Science admits suitably qualified applicants directly from secondary school into first-year engineering.... except in the case of the Engineering Physics program, which requires five years' study.</p> <p style="text-align: center;">.</p> <p style="text-align: center;">.</p> <p style="text-align: center;">.</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,195,272,26">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,195,272,26</a></p> <p><b>Present Calendar Entry:</b></p> <p><b>Introduction</b>  The Faculty offers programs of undergraduate study leading to the Bachelor of Applied Science in the following areas of engineering: Biomedical Engineering, Chemical Engineering, Chemical and Biological Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Physics, Geological Engineering, Integrated Engineering, Materials Engineering, Mechanical Engineering, and Mining Engineering.</p> <p style="text-align: center;">.</p> <p style="text-align: center;">.</p> <p style="text-align: center;">.</p> <p>The Faculty of Applied Science admits suitably qualified applicants directly from secondary school into first-year engineering... except in the case of the Engineering Physics program which requires five years' study.</p> <p style="text-align: center;">.</p> <p style="text-align: center;">.</p> <p style="text-align: center;">.</p> <p><b>Type of Action:</b>  Include the proposed new degree program in the BASc Introduction page.  Correct the punctuation error. (a comma is required before 'which')</p> <p><b>Rationale for Proposed Change:</b>  The list of programs should include the new program when it is approved by the Ministry of Advanced Education and it is launched.</p>

### 5a. Calendar Curriculum Change Forms - ENVE Courses

Below are the calendar curriculum change forms that establish the six proposed ENVE courses.

#### Category: (1)

<b>Faculty:</b> Applied Science <b>Departments:</b> Chemical & Biological Engineering and Civil Engineering <b>Faculty Approval Date:</b> Nov 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 2019 <b>Contact Person:</b> Gregory Lawrence <b>Phone</b> (604) 822-5371 <b>Email:</b> lawrence@civil.ubc.ca
<b>Proposed Calendar Entry:</b>  ENVE 200 (4) Environmental Engineering Design and Decision Making  Environmental Engineering design and decision-making, analysis tools and techniques, data illustration and other communication techniques, professional development including ethics and equity. Subject themes include water, air and soil. [3-0-2]  <i>Prerequisites:</i> 2 <sup>nd</sup> year standing	<b>URL:</b>  <b>Present Calendar Entry:</b> N/A – new course code. See above  <b>Type of Action:</b> Create a new ENVE course  <b>Rationale for Proposed Change:</b> This will be a mandatory core course in the (proposed) Bachelor of Applied Science in Environmental Engineering program. Modelled after the innovative first year courses APSC 100 and 101, it is one of four increasingly complex active-learning project-focused courses in which students become familiar with environmental engineering practice while learning to integrate and apply introductory knowledge. The flipped classroom environment is augmented by weekly studios during which student teams construct their understanding of environmental engineering by building on their first year learning experiences.  √ <b>Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> Courses in Applied Science cannot be taken on a Cr/D/Fail basis

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Departments:</b> Chemical & Biological Engineering and Civil Engineering <b>Faculty Approval Date:</b> Nov 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 2019 <b>Contact Person:</b> Gregory Lawrence <b>Phone</b> (604) 822-5371 <b>Email:</b> lawrence@civil.ubc.ca
<b>Proposed Calendar Entry:</b>  ENVE 201 (3) Technical Communications for Environmental Engineering  All aspects of technical communication, including report preparation, business correspondence, and oral presentation, applied to environmental engineering specific cases and projects. [3-0-0]  <i>Prerequisites:</i> all of ENGL 112 or WRDS 150. <i>Corequisites:</i> one of ENVE 200, 202, or 203 <i>Anti-requisites:</i> APSC 201	<b>URL:</b>  <b>Present Calendar Entry:</b> N/A – new course code. See above  <b>Type of Action:</b> Create a new ENVE course  <b>Rationale for Proposed Change:</b> This will be a mandatory technical communications course in the (proposed) Bachelor of Applied Science in Environmental Engineering program. Students will practice communication techniques that they will then use throughout the ENVE program, including in ENVE 202, 204, 301, and 401.  ✓ <b>Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> Courses in Applied Science cannot be taken on a Cr/D/Fail basis



**Category: (1)**

<b>Faculty:</b> Applied Science <b>Departments:</b> Chemical & Biological Engineering and Civil Engineering <b>Faculty Approval Date:</b> Nov 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 2019 <b>Contact Person:</b> Gregory Lawrence <b>Phone</b> (604) 822-5371 <b>Email:</b> lawrence@civil.ubc.ca
<b>Proposed Calendar Entry:</b>  ENVE 202 (4) Environmental Engineering Science  Analysis of integrated environmental systems, quantification of fundamental chemical and biological processes, systems design, evaluation of environmental impact, future trends. [3-2-0]  <i>Prerequisites:</i> all of CHEM 154, CIVL 204, CHBE 241, ENVE 200	<b>URL:</b>  <b>Present Calendar Entry:</b> N/A – new course code. See above  <b>Type of Action:</b> Create a new ENVE course  <b>Rationale for Proposed Change:</b> This will be a mandatory core course in the (proposed) Bachelor of Applied Science in Environmental Engineering program. It is one of four increasingly complex active-learning project-focused courses during which students integrate their design and environmental engineering knowledge to complex environmental engineering problems.  ✓ <b>Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> Courses in Applied Science cannot be taken on a Cr/D/Fail basis

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Departments:</b> Chemical & Biological Engineering and Civil Engineering <b>Faculty Approval Date:</b> Nov 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 2019 <b>Contact Person:</b> Gregory Lawrence <b>Phone</b> (604) 822-5371 <b>Email:</b> lawrence@civil.ubc.ca
<b>Proposed Calendar Entry:</b>  ENVE 203 (4) Environmental Engineering and Sustainability  Sustainability vocabulary and systems theory relevant to environmental engineering practice, foundational sustainability topics including those relating to urban ecology, industrial ecology/circular economy, and humanitarian engineering, stakeholder analysis, communication, and adaptive change leadership skills [3-0-2]  <i>Prerequisites:</i> ENVE 200	<b>URL:</b> <b>Present Calendar Entry:</b> N/A – new course code. See above <b>Type of Action:</b> Create a new ENVE course  <b>Rationale for Proposed Change:</b> This will be a mandatory technology and society course in the (proposed) Bachelor of Applied Science in Environmental Engineering program. Students will hone their skills in thinking through, and articulating arguments relating to, complex ill-structured sustainability problems relevant to environmental engineering practice. They will be formally mentored by senior faculty members who will meet bi-weekly with small groups to discuss relevant professional development issues, thereby supporting the development of critical professional skills.  √ <b>Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> Courses in Applied Science cannot be taken on a Cr/D/Fail basis

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Departments:</b> Chemical & Biological Engineering and Civil Engineering <b>Faculty Approval Date:</b> Nov 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 2019 <b>Contact Person:</b> Gregory Lawrence <b>Phone</b> (604) 822-5371 <b>Email:</b> lawrence@civil.ubc.ca
<b>Proposed Calendar Entry:</b>  ENVE 301 (3) Environmental Engineering Intermediate Design Project  Real-time, fully-integrated, conceptual and detailed design experiences that address an ill-structured, socially and technically complex but small-scale, environmental engineering problem for remote, rural and culturally distinct communities. [2-0-3]  <i>Prerequisites:</i> 3 <sup>rd</sup> Year Standing	<b>URL:</b>  <b>Present Calendar Entry:</b> N/A – new course code. See above  <b>Type of Action:</b> Create a new ENVE course  <b>Rationale for Proposed Change:</b> This will be a mandatory core course in the (proposed) Bachelor of Applied Science in Environmental Engineering program. It is one of four increasingly complex active-learning project-focused courses during which students integrate their design and environmental engineering knowledge to complex environmental engineering problems.  √ <b>Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> Courses in Applied Science cannot be taken on a Cr/D/Fail basis

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Departments:</b> Chemical & Biological Engineering and Civil Engineering <b>Faculty Approval Date:</b> Nov 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 2019 <b>Contact Person:</b> Gregory Lawrence <b>Phone</b> (604) 822-5371 <b>Email:</b> lawrence@civil.ubc.ca
<b>Proposed Calendar Entry:</b>  ENVE 401 (6) Environmental      Engineering      Capstone Project  Application of chemical, biological, and environmental science; engineering concepts; sustainable development and health and safety considerations; engineering economics; and life cycle analysis. Conceptual and detailed design for a multi-scale and complex environment health and protection problem. [1-0-4]  <i>Prerequisites:</i> 4 <sup>th</sup> Year Standing	<b>URL:</b>  <b>Present Calendar Entry:</b> N/A – new course code. See above  <b>Type of Action:</b> Create a new ENVE course  <b>Rationale for Proposed Change:</b> This will be a mandatory core course in the (proposed) Bachelor of Applied Science in Environmental Engineering program. It is the fourth of four increasingly complex active-learning project-focused courses during which students integrate and apply their design and environmental engineering knowledge to complex environmental engineering problems situated within an ill-structured, interdependent, large-scale, social and technical context.  √ <b>Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> Courses in Applied Science cannot be taken on a Cr/D/Fail basis

## UBC Curriculum Proposal Form Change to Course or Program

**Category: 1**

<p><b>Faculty:</b> APSC  <b>Department:</b> CHBE  <b>Faculty Approval Date:</b>  Feb 28, 2019  <b>Effective Session (W or S):</b> W2  <b>Effective Academic Year:</b> 2019</p>	<p><b>Date:</b> 25 January 2019  <b>Contact Person:</b> Louise Creagh  <b>Phone:</b> 604-827-5210  <b>Email:</b> alcreagh@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b>  CHBE 451 (3) <b>Engineering Thermodynamics and Statistical Mechanics</b>    Classical thermodynamic relations from a molecular perspective. Pressure-volume-temperature relations; chemical equilibria by Gibbs' method; vapor-liquid equilibria; thermodynamic calculations based on macroscopic and statistical methods; nonequilibrium processes; molecular simulations.    Credit will be granted for only one of CHBE 451, CHBE 551.    Pre-requisite: CHBE 346 or MTRL 350 (or equivalent)    <b>[3-0-2*]</b></p>	<p><b>URL:</b>  n/a</p> <p><b>Present Calendar Entry:</b>  n/a</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b>  Today, prediction of macroscopic behavior from a molecular perspective is an essential approach of research and development of many engineering applications. Such course is not available in the current undergraduate chemical engineering curriculum.</p> <p style="text-align: center;">X      <b>Not available for Cr/D/F grading</b>  (undergraduate courses only)</p> <p><b>Rationale for not being available for Cr/D/F:</b> This will be a technical elective course for the Chemical Engineering and Chemical &amp; Biological Engineering programs.    <div style="display: flex; justify-content: space-around;"> <span>Pass/Fail or</span> <span>Honours/Pass/Fail grading</span> </div></p>

<b>Faculty:</b> APSC <b>Department:</b> ECE <b>Faculty Approval Date:</b> Feb 28, 2019 <b>Effective Session:</b> 2019W <b>Effective Academic Year:</b>	<b>Date:</b> January 30, 2019 <b>Contact Person:</b> Nick Jaeger <b>Phone:</b> 7-5673 <b>Email:</b> nickj@ece.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>CPEN 223 (4) Software Design for Engineers</b> <b>[3-2-0]</b> Introduction to robust software design: static typing, procedural specifications, unit testing, black-box & white-box tests, user-defined data types (representations, invariants, abstraction functions), data abstractions, communicating design (e.g., UML). Pre-requisite: APSC 160	<b>Present Calendar Entry:</b>  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This is a 2 <sup>nd</sup> course in software design for engineers. The course is being created as a response to the need for additional software building experience as applied to solving problems that arise in engineering contexts. The initial target audience for the course are students in the newly created BASc programs in Biomedical Engineering and Manufacturing Engineering,  <b>X      Not available for Cr/D/F grading (undergraduate courses only)</b>

<b>Faculty:</b> Faculty of Applied Science <b>Department:</b> Manufacturing Engineering <b>Faculty Approval Date:</b> Feb 28, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Jan. 15/19 <b>Contact Person:</b> Warren Poole <b>Phone:</b> (604) 822-3674 <b>Email:</b> warren.poole@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>MANU 201 (3) Technical Communication</b>  Written and oral communication in business correspondence, engineering design methods, report preparation and oral presentations of technical material. Restricted to students in second year of the Manufacturing Engineering Program. <i>This course is not eligible for Credit/D/Fail grading.</i> [3-0-0]  <i>Pre-requisite:</i> One of APSC 176, ENGL 110, ENGL 111, ENGL 112, ENGL 120, ENGL 121, WRDS 150  <i>Equivalency:</i> APSC 201	<b>URL:</b> none  <b>Present Calendar Entry:</b> None  <b>Type of Action:</b> Add a new course  <b>Rationale for Proposed Change:</b> This will be a required course in the new Bachelor of Applied Science in Manufacturing Engineering program. The majority of our programs have moved to a program specific version of the 2 <sup>nd</sup> year technical communications course. This makes it easier to section students and create linkages between a core technical course in the program. Core learning outcomes for all of our 2 <sup>nd</sup> year technical communications courses are comparable to one another. We did not create a course with the MANU code in the first instance as when the program was first being developed we did not yet have confirmation of whether additional seats would be made available for expansion (which was necessary for this program to be viable). Therefore we used APSC 201 in the original proposal as it was pre-existing. Now that the program is approved and the new seats are funded, it is worth proceeding with a code-change to MANU 201.  <b>Category 1</b>  X <b>Not available for Cr/D/F grading</b> (undergraduate courses only)  <b>Pass/Fail or      Honours/Pass/Fail grading</b>

<b>Faculty:</b> APSC <b>Department:</b> Mining Engineering <b>Faculty Approval Date:</b> Feb 28, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> 31 <sup>st</sup> January 2019 <b>Contact Person:</b> Davide Elmo <b>Phone:</b> 604-822-9304 <b>Email:</b> delmo@mining.ubc.ca
<b>Proposed Calendar Entry:</b>  Second Year APSC 201 3 CIVL210 4 EOSC210 3 MATH253 3 MATH255 3 MECH260 3 MECH280, CIVL215 or CHBE251 3(4) MINE224 4 MINE291 3 MINE292 3 MINE293 1 STAT251 3 Complementary Study Electives 3 Total Credits 39(40)  Third Year APSC278 3 APSC279 1 ELEC203 3 MINE302 3 MINE304 3 <b>MINE303 4</b> MINE310 4 MINE331 3 <b>MINE333 3</b> MINE350 3 MINE393 1 MINE396 3 Technical Electives 6 <b>Total Credits 40</b>  Fourth Year <b>APSC450 2</b> MINE402 3 MINE404 3 MINE432 3 MINE465 3 MINE480 3 MINE486 3 MINE491 6 MINE493 1 Any 2 of: MINE403, MINE420, MINE434, MINE462, MINE455 6	<b>URL:</b> <a href="http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,195,272,45">http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,195,272,45</a> <b>Present Calendar Entry:</b>  Second Year APSC 201 3 CIVL210 4 EOSC210 3 MATH253 3 MATH255 3 MECH260 3 MECH280, CIVL215 or CHBE251 3(4) MINE224 4 MINE291 3 MINE292 3 MINE293 1 STAT251 3 Complementary Study Electives 3 Total Credits 39(40)  APSC278 3 APSC279 1 ELEC203 3 MINE302 3 MINE304 3 MINE303 <del>3</del> MINE310 4 MINE331 3 MINE333 3 MINE350 3 MINE393 1 MINE396 3 Technical Electives 6 <del>Total Credits 39</del>  Fourth Year APSC450 2 MINE402 3 MINE404 3 MINE432 3 MINE465 3 MINE480 3 MINE486 3 MINE491 6 MINE493 1 Any 2 of: MINE403, MINE420, MINE434, MINE462, MINE455 6





## THE UNIVERSITY OF BRITISH COLUMBIA

Complementary Study Electives	3	Complementary Study Electives	3
Total Credits	36	Total Credits	36
		<b>Type of Action:</b> Changes to credits for MINE303, which result in changes of total credits for Third Year (40). Total number of credits for the program increased to 150.	
		<b>Rationale for Proposed Change:</b> Need to increase the number of credit hours for courses, like MINE303, that teach fundamentals concepts of rock mechanics and rock engineering. This change will also allow to increase the number of accreditation Units for the Mining degree program.	



THE UNIVERSITY OF BRITISH COLUMBIA

**ARCL – Department of Anthropology (ANTH)**

*ARCL 235 (3) Controlling Nature: Plant and Animal Domestication*

<b>Category: (1) Faculty:</b> Arts <b>Department:</b> Anthropology <b>Faculty Approval Date:</b> Mar. 21, 2019 <b>Effective Session (W or S):</b> Winter <b>Effective Academic Year:</b> 2019	<b>Received:</b> January 7, 2019 <b>Contact Person:</b> Carole Blackburn and Camilla Speller <b>Phone:</b> 604-822-2303 <b>Email:</b> <a href="mailto:blcarole@mail.ubc.ca">blcarole@mail.ubc.ca</a> and <a href="mailto:camilla.speller@ubc.ca">camilla.speller@ubc.ca</a>
<b>Proposed Calendar Entry:</b>  <b>ARCL 235 (3) Controlling Nature: Plant and Animal Domestication</b>  How, when and why humans became dependent on cultivated foods and domestic animals and the methods used to document plant and animal domestication.  <i>Prerequisite:</i> ARCL 103.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=ARCL">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=ARCL</a>  <b>Present Calendar Entry:</b> None  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> This course will enhance content already being introduced in other courses, and address increasing student demand for second year archaeological survey courses. It will expand the number of courses available to students pursuing a minor in archaeology. It will also serve as an additional option for meeting the Science Requirement for Arts students.

*ARCL 345 (3) Molecular Archaeology*

<b>Category: (1) Faculty:</b> Arts <b>Department:</b> Anthropology <b>Faculty Approval Date:</b> Mar. 21, 2019 <b>Effective Session (W or S):</b> Winter <b>Effective Academic Year:</b> 2019	<b>Received:</b> January 7, 2019 <b>Contact Person:</b> Carole Blackburn and Camilla Speller <b>Phone:</b> 604-822-2303 <b>Email:</b> <a href="mailto:blcarole@mail.ubc.ca">blcarole@mail.ubc.ca</a> and <a href="mailto:camilla.speller@ubc.ca">camilla.speller@ubc.ca</a>
<b>Proposed Calendar Entry:</b>  <b>ARCL 345 (3) Molecular Archaeology</b>  Molecular techniques in archaeology and their application to anthropological and archaeological research.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=ARCL">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=ARCL</a>  <b>Present Calendar Entry:</b> None  <b>Type of Action:</b> Create a new course

<p><i>Prerequisite:</i> One of ARCL 103, ARCL 203, or FSCT 201.</p>	<p><b>Rationale for Proposed Change:</b> This course will keep pace with the developing discipline in archaeological science, fill increasing student demand for advanced bioarchaeology classes and expand the number of courses available to students pursuing a minor in archaeology. It will also serve as an additional option for meeting the Science Requirement for Arts students.</p>
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### ASIA – Department of Asian Studies (ASIA)

#### ASIA 395 (3) Modern Persian Literature

<p><b>Category: (1) Faculty:</b> Arts <b>Department:</b> Asian Studies <b>Faculty Approval Date:</b> Mar. 21, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019</p>	<p><b>Submitted:</b> December 18, 2018 <b>Contact Person:</b> Mostafa Abedinifard and Lyndsay Bocchinfuso <b>Phone:</b> 2-9266 <b>Email:</b> lyndsay.bocchinfuso@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>ASIA 395 (3) Modern Persian Literature</b></p> <p>Modern Persian literature, including fiction, drama, and/or poetry, of Iran, Afghanistan, and/or Tajikistan dating from the mid-19th to the 21st century (in English translation).</p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=ASIA">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=ASIA</a></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b> New course</p> <p><b>Rationale for Proposed Change:</b> Currently, the Department of Asian Studies' course schedule includes a course titled "Classical Persian Literature in English Translation." Over the past years, this course has been highly welcomed by students from various disciplines. However, the course covers only works from the pre-modern era. This proposed course "Modern Persian Literature in English Translation" is intended to complement the above course on the calendar. Offering this course will have at least two benefits: 1) it will enable interested students to take both of the above courses for a more comprehensive coverage of Persian literature from the classical</p>

	<p>times to the 21st century; and, 2) it will be useful to those students who might like to study only modern Persian literature.</p> <p>As an addition to the gradually growing list of the courses on Iran and the Persian language, literature, and culture, this course will also be compatible with the ongoing efforts within the Department to expand the Iranian/Persian studies initiative and hopefully launch a program in the future.</p> <p>As with all ASIA code courses, this course is taught in English and no background in Persian language is required.</p>
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*ASIA 461 (3) Gender and Sexuality in Modern Iranian Narratives*

<p><b>Category: (1) Faculty:</b> Arts</p> <p><b>Department:</b> Asian Studies</p> <p><b>Faculty Approval Date:</b> Mar. 21, 2019</p> <p><b>Effective Session (W or S):</b> W</p> <p><b>Effective Academic Year:</b> 2019</p>	<p><b>Received:</b> December 18, 2018</p> <p><b>Contact Person:</b> Mostafa Abedinifard and Lyndsay Bocchinfuso</p> <p><b>Phone:</b> 2-9266</p> <p><b>Email:</b> lyndsay.bocchinfuso@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>ASIA 461 (3) Gender and Sexuality in Modern Iranian Narratives</b></p> <p>Literary, cinematic, folk, and/or popular culture texts from modern Iran. Emphasis on constructions and contestations of masculinities and femininities, as they intersect with sexuality, race, ethnicity, ability, and/or religion.</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=ASIA">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=ASIA</a></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b> New course</p> <p><b>Rationale for Proposed Change:</b>  During the past several years, the Department has made valuable efforts to initiate a Persian and Iranian studies program. While this goal is yet to be achieved, currently three of the courses on the Department's calendar are allotted to Persian and Iranian studies, all of which have been highly welcomed so far by students in various disciplines. All three courses, however, are general courses about Iranian history, classical Persian literature, and post-revolutionary Iranian cinema. Aimed to complement that list, this course will focus on gender and sexuality in Iranian narratives. (While</p>

	<p>“Persian/Farsi” is its official language, modern Iran remains a highly multilingual, multi-ethnic, and multicultural nation-state. Hence, the term “Iranian,” rather than “Persian,” in the title, to allow more comprehensive coverage of topics and course materials, if needed.) A course of a similar topic was offered under a ‘Topics Course’ for 2018W Term 2. It had full enrollment and as such, we believe a course of this nature would be in high demand for students.</p>
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### **CENS – Department of Central, Eastern and Northern European Studies (CENES)**

#### *CENS 308 (3) Comics and Graphic Novels in Central, Eastern and Northern Europe*

<p><b>Category: (1) Faculty:</b> Arts  <b>Department:</b> CENES  <b>Faculty Approval Date:</b> Mar. 21, 2019  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2019-2020</p>	<p><b>Received:</b> November 27, 2018  <b>Contact Person:</b> Ilinca Iuarascu and Jason Lieblang  <b>Phone:</b> 604-822-6489  <b>Email:</b> iurascu@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>CENS 308 (3) Comics and Graphic Novels in Central, Eastern and Northern Europe</b></p> <p>Political, cultural and social themes in European comics and graphic media</p>	<p><b>URL:</b></p> <p><a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CENS">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CENS</a></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b> New Course</p> <p><b>Rationale for Proposed Change:</b></p> <p>The last twenty years have witnessed a northward and eastward shift away from the traditional Franco-Belgian centre of European comics production, with German-speaking, Scandinavian and Eastern European countries becoming the medium’s new European hot spots. Increasingly, the best graphic novels produced in these countries are being translated into English, making them for the first time available for undergraduate study here in North America. The course proposed here shares a focus on the regional distinctiveness of language, culture and</p>

	<p>history with those CENS-designated courses already offered. The course also offers students the opportunity to study an inherently hybrid medium that stresses visual expression in the relationship between form and narrative, and foregrounds the question of cultural legitimacy: arts/popular culture, canon/contemporary literature and art, and verbal/visual communication. As such, students will be able to supplement their insights from traditional disciplines (literature, film, drama) with those of a medium that favors a cross-cultural and interdisciplinary approach.</p> <p>Concurrent with other comics-related courses offered by the Departments of English, Asian Studies and History, this course focuses on comics as contemporary literature and art, supplementing the offerings of UBC, as well as CENES. The Department's CENS courses are its most popular, with 200-level CENS courses regularly filling six sections of 40 plus per year, while 300- and 400-level CENS courses fill well above the cap of 40, with 60 plus the norm for CENS 303A and CENS 307. The popularity of the comics medium suggests that the proposed course could be offered as a pure elective and still prove successful. This is an important consideration, cf. the uncertainty regarding the future of the Faculty of Arts Literature requirement. Furthermore, this course has been designed so it can be offered in both traditional and blended formats, the latter of which is popular with students with less flexible schedules because of program and/or work constraints. The course need not but can be co-taught, and will be when possible thus enabling students to enjoy the combined expertise of instructors with firsthand knowledge of German, Slavic and Scandinavian language and respective scenes</p>
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	of contemporary literature and art. This aspect makes the course stand out in both supplementing and combining insights from other CENS-designated and language program courses.
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**CLST – Department of Classical, Near Eastern and Religious Studies (CNERs)***CLST 101 (3) Greek and Latin Roots of English*

<b>Category: 1 Faculty:</b> Arts <b>Department:</b> CNERs <b>Faculty Approval Date:</b> Mar. 21, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2020	<b>Date:</b> November 1, 2018 <b>Contact Person:</b> Matthew McCarty <b>Phone:</b> 822-5613 <b>Email:</b> matthew.mccarty@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>CLST 101 (3) Greek and Latin Roots of English</b>  Greek and Latin roots of English vocabulary and grammar, with an introduction to language history and Greek and Roman culture.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CLST">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CLST</a>  <b>Present Calendar Entry:</b> None  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This course will offer students an introduction to the relevance of Classical languages for contemporary English communication (reading, writing, vocabulary building) while developing students' ability to do etymological analysis. It has been designed in order to provide students an alternative path to begin engaging with Greek and Latin besides taking LATN and GREK 101. It also fits in with a longer-term plan to redevelop our language teaching in CNERs more generally.



## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<b>Faculty:</b> Commerce <b>Faculty Approval Date:</b> <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> 2019 Feb 06 <b>Contact Person:</b> Kin Lo <b>Phone:</b> 2-8430 <b>Email:</b> kin.lo@sauder.ubc.ca
<b>Proposed Calendar Entry:</b>  <i>Academic Regulations</i> ...  <b>Dean's Honour Roll</b>  The words "Dean's Honour Roll" will be placed on a student's transcript if they have achieved an average of 80% or better in a Winter Session. To be eligible, a Winter Session must contain at least <b>24</b> percentage-graded credits. Students in a co-operative education program who are registered at UBC for only one term in Winter Session because of a co-op placement must be in a program of <b>12</b> credits for that term. Grades obtained by students registered in a study abroad or exchange program during the Winter Session will be considered. To qualify, a student must pass all courses.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,295,132">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,295,132</a>  <b>Present Calendar Entry:</b>  <i>Academic Regulations</i> ...  <b>Dean's Honour Roll</b>  The words "Dean's Honour Roll" will be placed on a student's transcript if they have achieved an average of 80% or better in a Winter Session. To be eligible, a Winter Session must contain at least <b>27</b> percentage-graded credits. Students in a co-operative education program who are registered at UBC for only one term in Winter Session because of a co-op placement must be in a program of <b>15</b> credits for that term. Grades obtained by students registered in a study abroad or exchange program during the Winter Session will be considered. To qualify, a student must pass all courses.
<b>Degree Completion</b>  Students must complete their degree requirements within six years of their original admission into the Faculty of Commerce and Business Administration.	<b>Degree Completion</b>  Students must complete their degree requirements within six years of their original admission into the Faculty of Commerce and Business Administration.
<b>Degree with Honours</b>  The words "with Honours" will be placed on the transcript of record and the degree certificate of a student graduating with the Bachelor of Commerce where the average	<b>Degree with Honours</b>  The words "with Honours" will be placed on the transcript of record and the degree certificate of a student graduating with the Bachelor of Commerce where the average





<p>is 80% or better in all upper-level Commerce courses. Grades obtained by students registered in a study abroad and exchange program will be considered. As well, the student must be enrolled in a <b>24</b> percentage-graded credit course load in Winter Session in at least one of year 3 or year 4.</p>	<p>is 80% or better in all upper-level Commerce courses. Grades obtained by students registered in a study abroad and exchange program will be considered. As well, the student must be enrolled in a <b>27</b> percentage-graded credit course load in Winter Session in at least one of year 3 or year 4.</p> <p>...</p> <p><b>Type of Action:</b> Reduce minimum credit requirement from 27 to 24 credits in a Winter Session (or 12 in a Term).</p> <p><b>Rationale for Proposed Change:</b> Change to align with Senate's revised policy for student awards (V-200.2), approved 2018 November 21.</p>
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**Category: 1**

<p><b>Faculty:</b> Commerce <b>Faculty Approval Date:</b> 2019 Mar 21 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019</p>	<p><b>Date:</b> February 14, 2019 <b>Contact Person:</b> Kin Lo <b>Phone:</b> 2-8430 <b>Email:</b> kin.lo@sauder.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>Concentrations</b></p> <p><b>Business Law Concentration</b></p> <p>The Business Law Concentration is designed to provide students with broad exposure to relevant and specific legal topics that underpin and inform the business world. It provides students with an in-depth understanding of the legal landscape that faces businesses and decision makers.</p> <p>Upon successful completion of the requirements for the Concentration, the notation "Business Law Concentration" will be added to the transcript of academic</p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.199,295,1675">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.199,295,1675</a></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b> Create new concentration.</p> <p><b>Rationale for Proposed Change:</b></p> <p>Businesses are operating in complex and ever-changing legal environments. To be an effective business decision maker, students should have an awareness and foundational understanding of the laws that govern and shape business. Every business person will engage with business law at some point in their career, whether it be commercial law and contracts, employment law, governance and business organizations or real estate law. Whether students plan to use this concentration as a foundational</p>



record.

### Course Requirements

Students are required to complete 12 credits as follows:

- 6 credits from the following commerce courses:

COHR 433(3) – Employment Law

COMM 434(3) – Land Law

- 3 credits from the following courses:

COMM 431(3) Law of Business

Associations

LAW 459 (3/4)d – Business

Organizations

- 3 credits from any of the following non-commerce courses:

ECON 367(3) – Economic Analysis of Law

LASO 204(3) – Introduction to Law and Society

LAW 316 (3) – International Law

LAW 334 (3) – Introduction to Asian Legal Systems

PHIL 331(3) Business and Professional Ethics

PHIL 338 Philosophy of Law

The 12 credits also count towards fulfilment of elective requirements in the Bachelor of Commerce. At most 3 credits from courses completed for the Business Law Concentration can be also counted towards satisfying a student's Option Requirements.

piece of their academic scaffolding or whether students specifically aim to continue on to law school, this concentration lays valuable groundwork.

Students regularly request a law concentration and informally are pursuing their own “makeshift” concentration by focusing on law courses. This concentration would be a formalization of such ad hoc programs of study.

**Category: (1)**

<b>Faculty:</b> Commerce <b>Faculty Approval Date:</b> 2019 Mar 21 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> 2019 Feb 14 <b>Contact Person:</b> Pam Lim <b>Phone:</b> 604 822-9216 <b>Email:</b> pam.lim@sauder.ubc.ca
<p><b>Proposed Calendar Entry:</b></p> <p><b>Business Analytics Concentration</b></p> <p>The Business Analytics concentration is designed for students looking to enhance their analytical skills and be able to provide organizations with data-driven recommendations to business problems.</p> <p>Upon successful completion of the requirements for the Concentration, the notation "Business Analytics Concentration" will be added to the transcript of academic record.</p> <p><b>Course requirements</b></p> <p>12 credits of business analytics courses approved by the Faculty.<sup>1</sup> The 12 credits also count towards fulfillment of elective requirements. If courses completed for the Business Analytics concentration overlap with required courses in a student's chosen option, only one 3-credit course can be counted toward fulfilling both the option and concentration requirement.</p> <p><sup>1</sup>See <a href="#">BCom Website</a> for list of approved business analytics courses available to fulfill this requirement.</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,295,1675">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,295,1675</a></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b> Create new concentration</p> <p><b>Rationale:</b>          Data is transforming our daily lives, businesses, and our society at large. With the advance of mobile computing, social media, and the Internet of Things, companies can collect detailed data on various individual, organizational, and societal activities. Business Analytics allows one to analyze this vast amount of data to extract insights and to make data-driven decisions on business and societal problems. The Business Analytics concentration will expose students to the concepts and techniques in business analytics and decision making, which enable students to thrive in the data-driven business world.</p> <p>UBC Sauder proposes to offer Business Analytics as a 'concentration' rather than an Option so that students have the flexibility to combine it with their studies in their primary Option (e.g. finance, accounting, marketing, etc.). Completion of the concentration will be recognized on the student's transcript.</p> <p>No new courses are created for the proposed concentration. Students will choose courses from a list of analytics</p>



	<p>related courses that are already being offered. The list of courses will identify a set of “business analytics core” courses, and another set of “business analytics elective” courses. Students will have to take 9 credits from the set of core courses and 3 credits from the set of elective courses. The list of courses is proposed below. However, a final list will be created after more extensive discussions are held within the Faculty.</p> <p>List of business analytics core courses:</p> <ul style="list-style-type: none"> <li>• COMM 337(3) Business Programming and Analytics</li> <li>• COMM 365(3) Market Research</li> <li>• COMM414(3) Data Visualization and Business Analytics</li> <li>• COMM 415(3) Quantitative Policy Analysis</li> <li>• COMM 437(3) Database Technology</li> </ul> <p>List of business analytics elective courses:</p> <ul style="list-style-type: none"> <li>• COMM 335(3) Information Systems Technology and Development</li> <li>• COMM 363(3) Marketing Analysis</li> <li>• COMM 443(3) Service Operations</li> <li>• COMM 449(3) Supply Chain Management</li> <li>• COMM 464(3) Digital Marketing</li> </ul>
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**Category: (1)**

<b>Faculty:</b> Sauder School of Business <b>Department:</b> Undergraduate Office <b>Faculty Approval Date:</b> <b>Effective Session (W or S):</b> Winter <b>Effective Academic Year:</b> 2019	<b>Date:</b> February 2, 2018 <b>Contact Person:</b> Pam Lim <b>Phone:</b> 604 822-9216 <b>Email:</b> pam.lim@sauder.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>COMM 435 (3) CIO Strategies</b>  <b>Common issues face by Chief Information Officers (CIO):</b> Cost and value of	<b>URL:</b> n/a  <b>Present Calendar Entry:</b> None  <b>Type of Action:</b>



information technology (IT), IT priorities, IT and the Board of Directors, Business-IT alignment, IT governance, IT talent management, standardization vs. innovation, project and vendor management/partnering, and managing security and risks. *This course is not eligible for Credit/D/Fail grading.*

**Prerequisite:** Comm 205

New Course

**Rationale:**

To provide the career outlook for students in Business Technology Management option, and Business and Computer Science double-major students. Course provides an overview of what it takes to lead and manage a large corporation's information technology.

This course has been offered previously as a pilot course.

☒ **Not available for Cr/D/F grading**

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

Courses in the Bachelor of Commerce program are generally not available for Cr/D/F grading.

☐ **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)

<b>Faculty:</b> Education <b>Department:</b> NITEP <b>Faculty Approval Date:</b> March 12, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> October 19, 2018 <b>Contact Person:</b> Jessica La Rochelle <b>Phone:</b> 604-822-5465 <b>Email:</b> <a href="mailto:jessica.larochelle@ubc.ca">jessica.larochelle@ubc.ca</a>														
<b>Proposed Calendar Entry:</b>  NITEP Secondary Option ... <b>NITEP Specialization in Indigenous Education</b>  <b>This option is designed primarily to provide an opportunity for Indigenous students entering the 12-month B.Ed. program, other than those in the 4-year Indigenous Teacher Education Program (NITEP), to complete a Specialization in Indigenous Education as part of the B.Ed. Program. The courses required for the Specialization in Indigenous Education will normally be completed in the winter or summer session prior to commencement of the standard B.Ed. curriculum and will require early registration in the B.Ed. program. In addition to completing the courses required for the Specialization in Indigenous Education, students must meet all academic requirements of the B.Ed. Program. The courses required for the Specialization in Indigenous Education do not replace any of the credits required as part of the standard B.Ed. program.</b>  <b>Indigenous Education Specialization:</b> <table style="width: 100%; border: none;"> <tr> <td colspan="2"><b>Total 15 credits</b></td> </tr> <tr> <td><b>EDUC 143</b></td> <td><b>2 credits</b></td> </tr> <tr> <td><b>EDUC 244</b></td> <td><b>2 credits</b></td> </tr> <tr> <td><b>*EDUC 140/141/240</b></td> <td><b>3 credits</b></td> </tr> <tr> <td><b>EDUC 344</b></td> <td><b>2 credits</b></td> </tr> <tr> <td><b>EDCP 362d</b></td> <td><b>3 credits</b></td> </tr> <tr> <td><b>LLED 336</b></td> <td><b>3 credits</b></td> </tr> </table>	<b>Total 15 credits</b>		<b>EDUC 143</b>	<b>2 credits</b>	<b>EDUC 244</b>	<b>2 credits</b>	<b>*EDUC 140/141/240</b>	<b>3 credits</b>	<b>EDUC 344</b>	<b>2 credits</b>	<b>EDCP 362d</b>	<b>3 credits</b>	<b>LLED 336</b>	<b>3 credits</b>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,202,320,945">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,202,320,945</a>  <b>Present Calendar Entry:</b>  NITEP Secondary Option ...  <b>Type of Action:</b> Addition of a Specialization in Indigenous Education concentration for Indigenous B.Ed. students who already have a Bachelor's degree.  <b>Rationale for Proposed Change:</b>  The Indigenous Teacher Education Program (NITEP) program has capacity to offer Indigenous Education concentration courses for field centre students who already possess a Bachelor's degree and who therefore do not need to undertake the concurrent NITEP B.Ed. degree pathway.  The Specialization in Indigenous Education would allow the Indigenous Teacher Education Program (NITEP) to provide a pathway for an increasing number of applications from students who already have a degree and would like to complete coursework with a focus on Indigenous Education as part of the B.Ed. program. Rather than have students complete the NITEP courses over three years, an option to complete courses in the academic year (Winter and Summer session) prior to completion of the standard B.Ed. curriculum in Winter session is being proposed. This would add a Specialization in Indigenous Education to their transcripts along with Elementary or Secondary education programs. 300-level courses may be applied towards a diploma in Education which may be completed following completion of the B.Ed. The Faculty of
<b>Total 15 credits</b>															
<b>EDUC 143</b>	<b>2 credits</b>														
<b>EDUC 244</b>	<b>2 credits</b>														
<b>*EDUC 140/141/240</b>	<b>3 credits</b>														
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<b>EDCP 362d</b>	<b>3 credits</b>														
<b>LLED 336</b>	<b>3 credits</b>														



<p><b>Total credits: 15 credits</b></p> <p><b>*or an approved Indigenous/First Nations Studies course. Course cannot have been used towards a previous degree.</b></p>	<p>Education offers teachers and other education professionals certificates and diplomas. The 30-credit diplomas offered through the Faculty do not lead to teacher certification, but will lead to a category upgrade.</p> <p>This specialization will address a rising need in communities where Indigenous teachers are highly desirable in growing numbers.</p>
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**Category: 1**

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Feb 13, 2019 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b> ... APPP Applied Science Professional ProgramPlatform <b>AQUA Aquaculture</b> ARBC Arabic Studies ...	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name</a> <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course code - AQUA  <b>Rationale for Proposed Change:</b> The course code is required for courses that will compose the proposed Graduate Certificate in Aquaculture.
<b>Proposed Calendar Entry:</b> ... APPP Applied Science Professional ProgramPlatform <b>AQUA Aquaculture</b> ARBC Arabic Studies ...	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code</a> <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course code - AQUA  <b>Rationale for Proposed Change:</b> The course code is required for courses that will compose the proposed Graduate Certificate in Aquaculture.
<b>Proposed Calendar Entry:</b> ... APBI Applied Biology <b>AQUA Aquaculture</b> FNH Food, Nutrition and Health ...	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;institution=9">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;institution=9</a> <b>Present Calendar Entry:</b> NA  <b>Type of Action:</b> Create new course code - AQUA  <b>Rationale for Proposed Change:</b> The course code is required for courses that will compose the proposed Graduate Certificate in Aquaculture.



**Category: 1**

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Feb 13, 2019 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>AQUA 501 (3) Aquaculture Production Systems</b>	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> This course will be required by students enrolled in the proposed Graduate Certificate in Aquaculture. The course content will allow students to develop competencies required for employment in the aquaculture and related industries.

**Category: 1**

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Feb 13, 2019 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>AQUA 502 (2) Fish Nutrition, Feeds and Feeding</b>	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> This course will be required by students enrolled in the proposed Graduate Certificate in Aquaculture. The course content will allow students to develop competencies required for employment in the aquaculture and related industries.

**Category: 1**

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Feb 13, 2019 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>AQUA 503 (3) Fish Health</b>	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> This course will be required by students enrolled in the proposed Graduate Certificate in Aquaculture. The course content will allow students to develop competencies required for employment in the aquaculture and related industries.

**Category: 1**

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Feb 13, 2019 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>AQUA 504 (2) Finfish Genetics and Reproduction in Aquaculture</b>	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> This course will be required by students enrolled in the proposed Graduate

	Certificate in Aquaculture. The course content will allow students to develop competencies required for employment in the aquaculture and related industries.
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**Category: 1**

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Feb 13, 2019 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>AQUA 505 (2) Ecological Sustainability of Aquaculture</b>	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> This course will be required by students enrolled in the proposed Graduate Certificate in Aquaculture. The course content will allow students to develop competencies required for employment in the aquaculture and related industries.

**Category: 1**

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Feb 13, 2019 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>AQUA 506 (2) Business Concepts in Aquaculture</b>	<b>URL:</b> N/A <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> This course will be required by students enrolled in the proposed Graduate Certificate in Aquaculture. The course

	content will allow students to develop competencies required for employment in the aquaculture and related industries.
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**Category: 1**

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Feb 13, 2019 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>AQUA 507 (2) Seafood Processing</b>	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> This course will be required by students enrolled in the proposed Graduate Certificate in Aquaculture. The course content will allow students to develop competencies required for employment in the aquaculture and related industries.

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Deans Office <b>Faculty Approval Date:</b> Nov. 8, 2018 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Sept 20, 2018 <b>Contact Person:</b> Tamara Etmanski <b>Phone</b> (604) 822-4488 <b>Email:</b> tamara.etmanski@ubc.ca
<p><b>Proposed Calendar Entry:</b></p> <p><b>APSC 542 (3) Leadership for Applied Scientists</b></p> <p>The meaning of and process of leading; tools for self, team and societal leadership. Character attributes, purposeful behaviors, strategies for enhancing personal performance, establishing effective teams, and transformational societal change.</p> <p>[3-0-0]</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=APSC">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=APSC</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b></p> <p>Since the courses for the Master of Engineering Leadership and Master of Health Leadership and Policy are closed to all other graduate students in the faculty, there is a need to create a course that will fill the gap in the faculty, teaching leadership skills to all the other graduate students. Leadership skills are particularly important for graduate students as they are often meant to be entering the workforce at a higher position than an undergraduate, often requiring leadership of teams and projects. The syllabus was strongly influenced by the activities and curriculum offered at iLead in Applied Science and Engineering at the University of Toronto, led by Prof. Doug Reeve, and the discussions held at NICKEL: A national conversation on engineering leadership education, held over the last 3 years.</p> <p>√ <b>Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b>Rationale for not being available for Cr/D/F:</b> Graduate course.</p>

**Category: (1)**

<b>Faculty:</b> APSC <b>Department:</b> MEL and MHLP <b>Faculty Approval Date:</b> Feb. 28, 2019 <b>Effective Session (W or S):</b> Winter <b>Effective Academic Year:</b> 2019/2020	<b>Date:</b> 24 <sup>th</sup> January, 2019 <b>Contact Person:</b> Helen May <b>Phone:</b> 604-822-9415 <b>Email:</b> helen.may@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>SPE</b> Sustainable Process Engineering	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name</a>  <b>Present Calendar Entry:</b>  None  <b>Type of Action:</b> Create new course code.  <b>Rationale for Proposed Change:</b> Create new course code in conjunction with renaming of this MEL program.  Feedback from prospective students, previous students and from industry has suggested that the Green Bio Products name is too niche and not broadly understood. This name suggests that the program is highly focused within one specific industry (Pulp & Paper).  Changing the specialization name to Sustainable Process Engineering (SPE) encompasses a much broader industrial audience and plethora of opportunities for its graduates. The term Sustainable Process Engineering refers to the integration of sustainability goals within chemical process and / or bioprocess engineering. For example the term can pertain to a new process to produce a chemical or a product without emitting carbon dioxide, or to a new process and product that derives from renewable sources as opposed to petroleum, or to the production of bio-based products, bioenergy and biochemicals. It is therefore agnostic to the industrial sector.

**Category: (1)**

<b>Faculty:</b> APSC <b>Department:</b> MEL and MHLP <b>Faculty Approval Date:</b> Feb 28, 2019 <b>Effective Session (W or S):</b> Winter <b>Effective Academic Year:</b> 2019/2020	<b>Date:</b> 24 <sup>th</sup> January, 2019 <b>Contact Person:</b> Helen May <b>Phone:</b> 604-822-9415 <b>Email:</b> helen.may@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>SPE</b> 503 (3) <b>Sustainable</b> Bioenergy and Biorefinery  Understanding technology of deriving biofuels and chemical feedstocks from forest biomass. Relating chemistry of biomass for production of liquid, solid and gaseous fuels. Processing options for value-added chemicals. <i>This course is not eligible for Credit/D/Fail grading.</i>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=GBPR">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=GBPR</a>  <b>Present Calendar Entry:</b>  <del>GBPR</del> 503 (3) Bioenergy and Biorefinery  Understanding technology of deriving biofuels and chemical feedstocks from forest biomass. Relating chemistry of biomass for production of liquid, solid and gaseous fuels. Processing options for value-added chemicals. <i>This course is not eligible for Credit/D/Fail grading.</i>  <b>Type of Action:</b> Edit course name and change course code  <b>Rationale for Proposed Change:</b> These changes are to reflect the proposed changes being made to the MEL in Green BioProducts degree, and therefore these minimal edits have been made to show continuity with the associated courses.

**Category: (1)**

<b>Faculty:</b> APSC <b>Department:</b> MEL and MHLP <b>Faculty Approval Date:</b> Feb 28, 2019 <b>Effective Session (W or S):</b> Winter <b>Effective Academic Year:</b> 2019/2020	<b>Date:</b> 24 <sup>th</sup> January, 2019 <b>Contact Person:</b> Helen May <b>Phone:</b> 604-822-9415 <b>Email:</b> helen.may@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>SPE</b> 502 (3) Sustainable <b>Bioproducts Processing</b>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=GBPR">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=GBPR</a>  <b>Present Calendar Entry:</b>  <del>GBPR</del> 502 (3) Sustainable <del>BioMaterial from Forest Biomass</del>

<p>Properties and characterization of macromolecules including rheology. Polymer processing and application to green products development including from lignocellulosic sources. Circular economy driven processing. Biomimetics engineering. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>Properties of biopolymers/chemical and physical characterization. Fundamentals of polysaccharide chemistry and derivatives with industrial examples. Wood composites and biocomposites and carbon fiber from lignin. Biomimicry inspired functional products. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b>Type of Action:</b> Change course code, rename course and expand course content</p> <p><b>Rationale for Proposed Change:</b> GBPR 502 was specifically created for the Master of Engineering Leadership (MEL) degree in the Green Bio- Products specialization. It was expected that other master students (MEng, MAsC) within APSC would also benefit from this newly developed course. With a shift in industry in North America and a lack of interest from student over the past 3 years this course has had very low registration numbers (under 5 students) and is unsustainable. We therefore wish to pivot this course to a broader audience interested in polymer engineering and its application to green products such as bioplastics.</p> <p>The terminology used in the calendar entry is meaningful to the audience that would be considering such a course and given that this is a graduate level course, it is expected that interested students would have a certain degree of background knowledge in this specialization. Further elaboration on course content would be expanded on the program and departmental websites, which would be useful to a wider range of audiences.</p>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Arts <b>Department:</b> CNERS <b>Faculty Approval Date:</b> Mar. 21, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 9, 2018 <b>Contact Person:</b> Matthew McCarty <b>Phone:</b> 822-5613 <b>Email:</b> matthew.mccarty@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>LATN 503 (3-6) d Studies in Latin Prose and Verse</b>  Advanced thematic studies using both Latin prose and Latin verse. May be repeated for up to 6 credits. <i>This course is not eligible for Credit/D/Fail grading.</i>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=LATN">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=LATN</a>  <b>Present Calendar Entry:</b> None  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> Our current 500-level language courses are limited to either prose or verse, preventing thematic studies that cross genres. Creating a new mixed-genre course will allow graduate students to hone their abilities to work across genres and sharpen their linguistic and interpretive skills, and to research across authors and generic lines, as is critical for a deeper of understanding ancient literature.  This course will be run alongside an undergraduate iteration of the course, LATN 403. A separate Category 1 proposal for that course has been approved by the Arts Curriculum Committee.

### Category: (1)

<b>Faculty:</b> Arts <b>Department:</b> CNERS <b>Faculty Approval Date:</b> Mar. 21, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> September 20, 2018 <b>Contact Person:</b> Matthew McCarty <b>Phone:</b> 822-5613 <b>Email:</b> matthew.mccarty@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>GREK 503 (3-6) d Studies in Ancient Greek Prose and Verse</b>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=GREK">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=GREK</a>  <b>Present Calendar Entry:</b> None  <b>Type of Action:</b> Create new course

Advanced thematic studies using both Greek prose and Greek verse. May be repeated for up to 6 credits. <i>This course is not eligible for Credit/D/Fail grading.</i>	<p><b>Rationale for Proposed Change:</b> Our current 500-level language courses are limited to either prose or verse, preventing thematic studies that cross genres. Creating a new mixed-genre course will allow students to hone their abilities to work across genres and sharpen their linguistic and interpretive skills in an upper-level research course.</p> <p>This course will be run alongside an undergraduate iteration of the course, GREK 403. A separate Category 1 proposal for that course has been approved by the Arts Curriculum Committee</p>
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**Category: (1)**

<p><b>Faculty:</b> Arts  <b>Department:</b> School of Library, Archival and Information Studies  <b>Faculty Approval Date:</b> Mar. 21, 2019  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2019</p>	<p><b>Date:</b> February 1, 2019  <b>Contact Person:</b> Richard Arias  <b>Phone:</b> 604-822-1458  <b>Email:</b> richard.arias@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>ARST 585 (3) Information Practice and Protocol in Support of Indigenous Initiatives</b>  <i>Equivalency:</i> LIBR 564</p> <p><i>Prerequisites:</i> All of (LIBR 506, LIBR 507, LIBR 508, and LIBR 509) or all of (ARST 510, ARST 515, ARST 516, and ARST 573).</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=3&amp;code=ARST">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=3&amp;code=ARST</a></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b></p> <p>Add new ARST course that will cover the same learned outcomes as existing course LIBR 564, and add equivalency with LIBR 564.</p> <p><b>Rationale for Proposed Change:</b>  LIBR 564 is a Library Studies course that is equally relevant to both the Master of Library and Information Studies (MLIS) program and the Master of Archival Studies (MAS) program, within the School of Library, Archival and Information Studies (iSchool).</p> <p>A current MAS program policy at the iSchool states that, with the approval of the Graduate Advisor, MAS students can take up to 12 credits other than those designated “ARST” at UBC. This internal policy is currently omitted</p>

in the UBC calendar, but it is implemented in practice. Cross listing LIBR 564 with a newly created course code ARST 585 will allow Master of Archival Studies (MAS) to count credits in this course towards their standard MAS elective credits rather than to the 12-credit limited non-ARST courses that they can take. This cross-listing will also eliminate the need for MAS students to request approval of the Graduate Advisor to take a course other than those designated ARST courses.

Another reason to cross-list this course is to provide flexibility for Dual MAS/MLIS students to enroll in the most convenient course code course for them to fulfil the following program requirement:

“Program Requirements:

A total of 81 credits. Of these, at least 36 must be ARST and 36 must be LIBR. The remaining nine credits can be a combination of ARST, LIBR, or other approved courses.” (UBC Calendar entry for Master of Archival Studies/Master of Library and Information Studies.”

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,208,367,338>)

According to this requirement, Dual MAS/MLIS students take between 18-21 Credits in ARST courses AND 21-24 Credits in LIBR courses AND 9 extra credits (LIBR OR ARST OR others). Having LIBR 586 cross listed with ARST 585 provides flexibility for Dual MLIS/MAS students to take this course using the most convenient code to complete their required minimum number of credits in ARST and LIBR courses.

ARST 585 course content will cover the same learned outcomes and syllabus as was approved for LIBR 564 by Senate in 2018.

Both LIBR and ARST programs are part of the School of Library, Archival & Information Studies, which has approved this proposal. Therefore, we have not submitted a

	consultation from SLAIS; however we have provided a signed budget form.
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<b>Faculty:</b> Commerce & Business Administration <b>Department:</b> <b>Faculty Approval Date:</b> 2019 Mar 21 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> January 30, 2019 <b>Contact Person:</b> Jessica Hanna/ Kin Lo <b>Phone:</b> 604 827 1732 / 604 822 8430 <b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a>
<b>Proposed Calendar Entry:</b>  <b>BA 515 (1.5) Fundamentals of Analytics &amp; Tech</b> <i>This course is not eligible for Credit/D/Fail grading</i>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT</a>  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This new course will be a required course in the Full-time MBA Program.  The vast amount of available internal and external data have created unprecedented challenges and opportunities for today's enterprises. Firms are increasingly relying on business analytics (BA) and technology to stay competitive. The ability to understand the roles of analytics and technology in identifying business problems and seizing opportunities, and to apply data analytics to enhance business performance have become key assets for managers.  This course will introduce the fundamentals of BA and technology and their applications in several industries (FinTech, healthcare, automation, customer analytics, etc.). The class will equip students with a managerial overview of BA and related concepts, a basic understanding of programming in BA and general exposure to real-world applications and trends.

**Category: 1**

<b>Faculty:</b> Commerce & Business Administration <b>Department:</b> 2019 Mar 21 <b>Faculty Approval Date:</b> <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> January 30, 2019 <b>Contact Person:</b> Jessica Hanna/ Kin Lo <b>Phone:</b> 604 827 1732 / 604 822 8430 <b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a>
<b>Proposed Calendar Entry:</b>  <b>BAEN 581 (1.5-3.0) d Contemporary Topics in Technology &amp; Business</b> <i>This course is not eligible for Credit/D/Fail grading</i>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAEN">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAEN</a>  <b>Present Calendar Entry:</b>  N/A  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This new course is an elective in the proposed Technology & Analytics Leadership Track for the Full-time MBA Program  BAEN 581 would be used to pilot future general technology and business courses that do not fit into one of the functional areas of Entrepreneurship.  Individual course could range from 1.5 to 3.0 credits, or if we piloted two 1.5 credit courses, students could take both.  Consequently, we are requesting variable credit for the course to be determined by the department.

**Category: 1**

<b>Faculty:</b> Commerce & Business Administration <b>Department:</b> <b>Faculty Approval Date:</b> 2019 Mar 21 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> January 30, 2019 <b>Contact Person:</b> Jessica Hanna/ Kin Lo <b>Phone:</b> 604 827 1732 / 604 822 8430 <b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a>
	<b>URL:</b>

<p><b>Proposed Calendar Entry:</b></p> <p><b>BAIT 515 (1.5) AI Commercialization</b>  <i>This course is not eligible for Credit/D/Fail grading</i></p>	<p><a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT</a></p> <p><b>Present Calendar Entry:</b></p> <p>N/A</p> <p><b>Type of Action:</b> New course</p> <p><b>Rationale for Proposed Change:</b> This new course is a required course as part of the proposed Technology &amp; Analytics Leadership Track for the Full-time MBA Program.</p> <p>Artificial intelligence (AI) is transforming many aspects of the business applications starting from targeted advertising, recommender systems, to autonomous vehicles. This course will provide an introduction to AI and its commercialization. The topics will include recommender systems, natural language processing, machine learning, computer vision, and deep learning, and so on. The course will also take a critical view on the societal impact of AI, considering the privacy, security, and ethics issues. Note that this course will familiarize students with some basic programming concepts, but will not teach programming in detail.</p>
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**Category: 1**

<p><b>Faculty:</b> Commerce &amp; Business Administration</p> <p><b>Department:</b></p> <p><b>Faculty Approval Date:</b> 2019 Mar 21</p> <p><b>Effective Session (W or S):</b> W</p> <p><b>Effective Academic Year:</b> 2019</p>	<p><b>Date:</b> January 30, 2019</p> <p><b>Contact Person:</b> Jessica Hanna/ Kin Lo</p> <p><b>Phone:</b> 604 827 1732 / 604 822 8430</p> <p><b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>BAIT 516 (1.5) Health &amp; Technology</b></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT</a></p> <p><b>Present Calendar Entry:</b></p> <p>N/A</p>

<p><i>This course is not eligible for Credit/D/Fail grading</i></p>	<p><b>Type of Action:</b> New course</p> <p><b>Rationale for Proposed Change:</b> This new course is an elective in the proposed Technology &amp; Analytics Leadership Track for the Full-time MBA Program.</p> <p>This course will examine how the health care business uses technology to improve outcomes, manage costs and enhance profits. It will primarily look at medical technology, informational technology, and bio technology. New technology that comes from innovations are adopted by providers and health care systems and often paid for government and other institutions. This course will expose students to the current technology environment in health systems and use case studies from around the world.</p>
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**Category: 1**

<p><b>Faculty:</b> Commerce &amp; Business Administration</p> <p><b>Department:</b></p> <p><b>Faculty Approval Date:</b> 2019 Mar 21</p> <p><b>Effective Session (W or S):</b> W</p> <p><b>Effective Academic Year:</b> 2019</p>	<p><b>Date:</b> January 30, 2019</p> <p><b>Contact Person:</b> Jessica Hanna/ Kin Lo</p> <p><b>Phone:</b> 604 827 1732 / 604 822 8430</p> <p><b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>BAIT 517 (1.5) Applications of Predictive Analytics &amp; Machine Learning</b></p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT</a></p> <p><b>Present Calendar Entry:</b></p> <p>N/A</p> <p><b>Type of Action:</b> New course</p> <p><b>Rationale for Proposed Change:</b> This new course is an elective in the proposed Technology &amp; Analytics</p>



	<p>Leadership Track for the Full-time MBA Program.</p> <p>Machine Learning (ML) is at the heart of modern data analytics and companies across all business sectors are leveraging to make valuable decisions. This course will provide student with familiarity in various topics and techniques in ML and its business and commercial applications. The course will cover predictive analytics (supervised learning) as well as unsupervised learning.</p>
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**Category: 1**

<p><b>Faculty:</b> Commerce &amp; Business Administration</p> <p><b>Department:</b></p> <p><b>Faculty Approval Date:</b> 2019 Mar 21</p> <p><b>Effective Session (W or S):</b> W</p> <p><b>Effective Academic Year:</b> 2019</p>	<p><b>Date:</b> January 30, 2019</p> <p><b>Contact Person:</b> Jessica Hanna/ Kin Lo</p> <p><b>Phone:</b> 604 827 1732 / 604 822 8430</p> <p><b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>BAIT 518 (1.5) Data Visualization</b>  <i>This course is not eligible for Credit/D/Fail grading.</i>  <b>Prerequisite: BABS 550</b></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  New course</p> <p><b>Rationale for Proposed Change:</b>  This is a required course in the proposed Technology &amp; Analytics Leadership Track for the Full-time MBA Program.</p> <p>Data is the universal language in the business world, and data visualization—the graphical representation of information contained in raw data—has become an integral part of business communications. Data visualization is one of the most useful professional skills that every manager should learn. It enables businesses to better organize information, discover hidden</p>

	<p>patterns, identify trends and opportunities, and foster data-driven decision-making.</p> <p>This course will provide a comprehensive introduction to the concepts, techniques, and applications of data visualization. The course will equip students with a managerial overview of data visualization, a general exposure to real-world applications, and more importantly, hands-on practices of data management and data visualization skills.</p>
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**Category: 1**

<p><b>Faculty:</b> Commerce &amp; Business Administration</p> <p><b>Department:</b></p> <p><b>Faculty Approval Date:</b> 2019 Mar 21</p> <p><b>Effective Session (W or S):</b> W</p> <p><b>Effective Academic Year:</b> 2019</p>	<p><b>Date:</b> January 30, 2019</p> <p><b>Contact Person:</b> Jessica Hanna/ Kin Lo</p> <p><b>Phone:</b> 604 827 1732 / 604 822 8430</p> <p><b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>BAIT 519 (1.5) Managing Automation</b>  <i>This course is not eligible for Credit/D/Fail grading</i></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT</a></p> <p><b>Present Calendar Entry:</b></p> <p>N/A</p> <p><b>Type of Action:</b>  New course</p> <p><b>Rationale for Proposed Change:</b>  This new course is an elective in the proposed Technology &amp; Analytics Leadership Track for the Full-time MBA Program.</p> <p>The convergence of several technological developments, such as machine learning, artificial intelligence, greater connectivity and digitization, is poised to lead to the automation of work in diverse industries and job categories. Examples include self-driving cars, the automation of warehouse technologies, greater use of industrial robots, and so on. For organizations to adapt to these new technologies, managers</p>

	need to understand how these technologies work and to understand the implications in terms of new business models and strategies.
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**Category: 1**

<b>Faculty:</b> Commerce & Business Administration <b>Department:</b> <b>Faculty Approval Date:</b> 2019 Mar 21 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> January 30, 2019 <b>Contact Person:</b> Jessica Hanna/ Kin Lo <b>Phone:</b> 604 827 1732 / 604 822 8430 <b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a>
<b>Proposed Calendar Entry:</b>  <b>BAIT 523 (1.5) FinTech</b> <i>This course is not eligible for Credit/D/Fail grading</i>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAIT</a>  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This is an elective in the proposed Technology & Analytics Leadership Track for the Full-time MBA Program.  The recent decade has seen technological innovations transform the financial services industry, and further disruptions of the traditional financial sector opens a large set of opportunities. The many advances in financial technology (FinTech) include Blockchain, virtual currencies, smart contracts, alternative lending, robo-advising, financial inclusion, and also applications of big-data analytics, artificial intelligence, alternative predictive modeling for process improvements. FinTech is poised to bring big gains in banking, financing, accounting, and insurance, but also risks, which must be managed appropriately. Therefore, it becomes important for managers to understand these technologies and their implications, and for entrepreneurs to identify opportunities.

**Category: 1**

<b>Faculty:</b> Commerce & Business Administration <b>Department:</b> <b>Faculty Approval Date:</b> 2019 Mar 21 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> January 30, 2019 <b>Contact Person:</b> Jessica Hanna/ Kin Lo <b>Phone:</b> 604 827 1732 / 604 822 8430 <b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a>
<b>Proposed Calendar Entry:</b>  <b>BAMA 520 (1.5) Customer Analytics</b> <i>This course is not eligible for Credit/D/Fail grading</i>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAMA">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAMA</a>  <b>Present Calendar Entry:</b>  N/A  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This new course is an elective in the proposed Technology & Analytics Leadership Track for the Full-time MBA Program.  Marketers' shift from customer acquisition to development and retention requires a new mindset from product-centric to customer-centric management and raises new questions. New forms of information technology provide increasingly rich data of individual-level customer behavior to address these issues but few firms have the expertise to intelligently act on such information. This course will provide students with the analytical tools that are necessary for understanding and predicting customer behavior and assessing customer lifetime value. The course will be grounded in relevant academic work as well as cases and exercises covering a broad set of industries and applications.

**Category: 1**

<b>Faculty:</b> Commerce & Business Administration <b>Department:</b> <b>Faculty Approval Date:</b> 2019 Mar 21 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> January 30, 2019 <b>Contact Person:</b> Jessica Hanna/ Kin Lo <b>Phone:</b> 604 827 1732 / 604 822 8430 <b>Email:</b> <a href="mailto:Jessica.hanna@sauder.ubc.ca">Jessica.hanna@sauder.ubc.ca</a> / <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a>
<b>Proposed Calendar Entry:</b>  <b>BAMA 521 (1.5) Business Development for Scaling Up</b> <i>This course is not eligible for Credit/D/Fail grading</i>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAMA">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=BAMA</a>  <b>Present Calendar Entry:</b>  N/A  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This new course is a required course in the proposed Technology & Analytics Leadership Track for the Full-time MBA Program.  This course is will focus on the learning of foundational skills in business development with a specific focus on the technology marketplace. In this course, students will become familiar with the management challenges facing technology organizations as they attempt to grow their business through standard business development practices. The focus will be on technology firms, although many of the principles apply to non-tech companies. Students will learn to identify growth issues and systematically apply practical, industry-relevant sales tools to address them. Topics will include growing customer acquisition through various sales models (in a technology context); relationship development, scaling business development operations, incentive systems, etc. The course goals are: To provide introductory skills and applied experiences in the

discipline of technology selling using the skill of building relationships that create value for both parties as its foundation

## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<b>Faculty:</b> Education <b>Department:</b> LLED <b>Faculty Approval Date:</b> March 12, 2019 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2019	<b>Date:</b> February 25, 2019 <b>Contact Person:</b> Meike Wernicke <b>Phone:</b> 604-827-2070 <b>Email:</b> meike.wernicke@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>LLED 521 (3) Interculturality in Language Education: Theories, Research, and Practice</b> May be offered in multiple languages; consult the department.	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> This course fills an important gap in the department's offerings. In education, cultural understanding has been defined in many ways, from navigating cultural differences or <i>mélanges</i> to acquiring specific kinds of knowledge or <i>savoirs</i> , to developing awareness of and the capacity for empathy, perspective taking, and adaptability. This course will examine intercultural learning as a way of mediating understanding across multiple frames of reference that engage a dynamic complex of diverse beliefs, values, assumptions, and actions which are grounded in differential power relations. Students will consider interculturality within the context of education, specifically as it pertains to the learning and teaching of language. The principal aim of the course is to provide teachers and teacher educators with resources to investigate and integrate productive ways of interpreting intercultural processes in their classrooms and beyond. Course content will attend to theoretical conceptions of culture and language, historical beginnings of intercultural research, critical and non-Western orientations and discourse approaches to interculturality. It will consider intercultural teaching and learning in language classrooms, on study abroad, and in digital environments, as well as in community contexts with a focus on the integration of local

	<p>Indigenous perspectives and includes an overview of well-known models of intercultural competence for assessment.</p> <p>The course will be included in the list of recommended courses master's students in TESL (Teaching English as a Second Language) and MLED (Modern Language Education) can take to fulfill degree requirements. It will also constitute one of the core courses of the online French Master's of Education program offered in the Faculty of Education.</p> <p>The course has been offered once in the past two years as a Special Topic Course, is currently being offered in 2018/19 WT2 and is scheduled to be offered in both English (WT2) and French (ST1) in 2020.</p> <p><input type="checkbox"/> <b>Pass/Fail or</b>    <input type="checkbox"/> <b>Honours/Pass/Fail grading</b></p>
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## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<p><b>Faculty:</b> Education  <b>Department:</b> ECPSE  <b>Faculty Approval Date:</b> March 12, 2019  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2019-2020</p>	<p><b>Date:</b> February 6, 2019  <b>Contact Person:</b> Laurie Ford  <b>Phone:</b> 2-0091  <b>Email:</b> laurie.ford@ubc.ca.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>EPSE 506 (3) Applied Psychopathology Across the Lifespan</b>  <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>URL:</b>  None at present- new course</p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b>  As a part of our doctoral program revisions we recognized a need to expand the focus of a number our required courses. We currently offer a course (EPSE 507) in Applied Child and Adolescent Psychopathology. This is required for students in our M.Ed. program. Students in the M.A. program who plan to continue to the Ph.D. program and students in the Ph.D. program need a course that addresses not only child psychopathology but also adult psychopathology as registered psychologists with training in school psychology work with children, adolescents, and adults. In addition, upon graduation students who pursue licensure are required to take the Examination for the Professional Practice of Psychology which examines psychopathology in children, youth, and adults. In light of this we have developed this new course which expands the focus to a lifespaces (birth through adulthood) with new content and objectives.</p>





<div><input type="checkbox"/></div>	<p><b>X</b>      <b>Not available for Cr/D/F grading</b> (undergraduate courses only)</p> <p><b>Rationale for not being available for Cr/D/F:</b> N/A</p> <p><input type="checkbox"/> Pass/Fail or      Honours/Pass/Fail grading No</p>
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## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<p><b>Faculty:</b> Education  <b>Department:</b> ECPS  <b>Faculty Approval Date:</b> March 12, 2019  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2019-2020</p>	<p><b>Date:</b> October 24, 2018  <b>Contact Person:</b> Laurie Ford  <b>Phone:</b> 2-0091  <b>Email:</b> laurie.ford@ubc.ca.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>EPSE 555 (3) Academic and Social-Emotional Assessment</b>  Prerequisite: All of EPSE 481, EPSE 482, EPSE 528 or permission of the instructor.  <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>URL:</b>  None at present- new course</p> <p><b>Present Calendar Entry:</b>  None at present- new course</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b></p> <p>The proposed course curriculum change results from a systematic review of the MEd, MA, and PhD graduate programs in School Psychology. The curriculum changes that result from this revision of the research-stream curriculum of the MA and PhD programs have also allowed the program faculty to revise the goals and content of the MEd program, and shift the direction of the MEd as, primarily, graduate preparation of professional school psychologist practitioners. The proposed MEd program revision includes several revised and reorganized courses, a new prerequisite and a reduction in total program credit requirements. The program revisions and reorganization of program content reflects efforts to provide appropriate preparation for school psychologist practitioners and ensure that program students have access to expertise across graduate programs within the department.</p>



The current proposal is one of the reorganized and refocused changes that we propose. The current Academic Assessment course (EPSE 534) has incorporated objectives and content that address both assessment of academic skills and abilities and the related elements required for academic intervention and remedial programming. Similarly, the current Social, Emotional and Behavioural Assessment course (EPSE 535) also includes objectives and content from the related elements required for social, emotional and behavioural intervention and remedial programming.

The proposed new course emphasizes only the assessment objectives and content related to academic assessment, and social-emotional assessment, leaving out the intervention and remediation elements. This efficiency allows the MEd program curriculum to incorporate academic and social-emotional intervention courses that already exist in the department (EPSE 531 and EPSE 576) taught by faculty with expertise in academic and behavioral intervention.

☐

**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.)



## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Education <b>Department:</b> ECPSE <b>Faculty Approval Date:</b> March 12, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019-2020	<b>Date:</b> February 6, 2010 <b>Contact Person:</b> Laurie Ford <b>Phone:</b> 2-0091 <b>Email:</b> laurie.ford@ubc.ca.
<b>Proposed Calendar Entry:</b>  <b>EPSE 556 (3) Cognitive and Academic Assessment Practicum</b> <i>This course is not eligible for Credit/D/Fail grading.</i> Pre or Corequisites: EPSE 528 & EPSE 553; Admission to the SCPS MA or PhD program or the CNPS PhD Program or permission of the instructor.	<b>URL:</b> None at present- new course  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b>  <p>The proposed course curriculum change results from a systematic review of the MEd, MA, and PhD graduate programs in School Psychology. The curriculum changes that result from this revision of the research-stream curriculum of the MA and PhD programs have also allowed the program faculty to revise the goals and content of the MA program, and shift the direction of the MA program as the foundation for the PhD.</p> <p>The current proposal is one of the reorganized and refocused changes that we propose. The current Practicum in Cognitive Assessment course (EPSE 554) has incorporated objectives and content that address assessment of cognitive skills and abilities with a strong focus on children and youth. Similarly, the current Academic Assessment course (EPSE 534) includes objectives and content that focuses on the academic assessment of school age students. We have integrated these two courses for students in the MA program who will continue to the PhD to make their program more efficient and integrated with less repetition.</p>



The proposed new course integrates standardized norm referenced cognitive and academic assessment for school age students and adults. This efficiency provides for opportunities for students accomplish objectives in one course given the skills for standardized cognitive and academic assessment readily generalize across content areas. The student and adult focus allows provides greater breadth of experiences for the student.

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

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

N/A

Pass/Fail or      Honours/Pass/Fail grading  
☒ N/A      ☐



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Education <b>Department:</b> ECPSE <b>Faculty Approval Date:</b> March 12, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019-2020	<b>Date:</b> February 6, 2010 <b>Contact Person:</b> Laurie Ford <b>Phone:</b> 2-0091 <b>Email:</b> laurie.ford@ubc.ca.
<b>Proposed Calendar Entry:</b>  <b>EPSE 634 (3-9) d Special Topics in Advanced Assessment in School and Applied Child Psychology</b> <i>This course is not eligible for Credit/D/Fail grading.</i> Prerequisites: EPSE 528 and EPSE 554; Admission to the SCPS or CNPS PhD Program.	<b>URL:</b> None at present- new course  <b>Present Calendar Entry:</b>  N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b>  The proposed course curriculum change, request for new course, results from a systematic review of the PhD program in School Psychology. The curriculum changes that result from this revision of the research-stream curriculum of the MA and PhD programs have also allowed the program faculty to revise the goals and content of the PhD program. This has resulted in the need for advanced coursework in assessment. In the past we have offered several advanced assessment courses as “special topics” (EPSE 565) courses.  It will be better for program graduates to have their transcript reflect the advanced training in assessment in the course title and not under the more generic EPSE 565 Special Topics. We would also like this distinguished as doctoral level course with a 600 number.



The proposed new course provides for an advanced assessment course in the program yet allows some flexibility of specific focus depending on student interest and faculty availability. In recent years we have offered special topic courses in Early Childhood Assessment and Neuropsychological Assessment. We anticipate these will continue as options in addition to possibilities such as Bilingual Assessment and Personality Assessment. The variable credit will allow students to take more than one version of the course if it meets their professional goals.

We have provided a sample syllabus for one of the topics, our most recent offering Neuropsychological Assessment as a part of this proposal.

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

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

N/A

☐ Pass/Fail or    ☐ Honours/Pass/Fail grading  
N/A

## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<b>Faculty:</b> Education <b>Department:</b> MET <b>Faculty Approval Date:</b> March 12, 2019 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2019	<b>Date:</b> Nov. 14, 2018 <b>Contact Person:</b> Dr. Teresa Dobson <b>Phone:</b> 604-827-2181 <b>Email:</b> teresa.dobson@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>ETEC 542 (3) Culture and Communication in Virtual Environments</b>	<b>URL:</b> n/a  <b>Present Calendar Entry:</b> n/a  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> This 3-credit course fills an important existing gap in the MET program curriculum: it introduces theory and research on the impact of culture on communications and learning in virtual learning environments, and considers challenges of effective technology implementation and eLearning design for diverse online classrooms in the globalizing world of online learning. It has been successfully piloted under a special topics number. It was well received by our students from diverse backgrounds and contexts. We would like to add it permanently to the MET curriculum.  <input type="checkbox"/> <b>Not available for Cr/D/F grading (undergraduate courses only)</b> (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.)  <b>Rationale for not being available for Cr/D/F:</b>  <input type="checkbox"/> <b>Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b> (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

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Feb 14, 2019 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>PLNT 590 (3) Advanced Topics in Plant Science</b>	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> The course is needed to provide a mechanism for offering graduate courses on a trial basis. The graduate program in PLNT currently has no mechanism to trial offer new graduate courses or special offerings. At the undergraduate level, APBI 490 fulfills a similar function. The proposed course would work identically, to allow faculty to offer new courses in order to gauge student interest.  While there is a Directed Study course (PLNT 530 (2-6) c Directed Studies), it would be more appropriate for students to enrol in a "Topics" course for trial offerings. The only other PLNT courses available are :  PLNT 523 (0) Graduate Research Seminar PLNT 540 (3) Plant Molecular Biology Laboratory PLNT 542 (3) Wine Grape and Berry Biology PLNT 549 (12/18) c Master's Thesis PLNT 649 (0) Doctoral Dissertation  <input type="checkbox"/> <b>Not available for Cr/D/F grading (undergraduate courses only)</b>

	<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><b>Rationale for not being available for Cr/D/F:</b> 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"/> <b>Pass/Fail or</b>    <input type="checkbox"/> <b>Honours/Pass/Fail grading</b> (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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## CELLULAR, ANATOMICAL & PHYSIOLOGICAL SCIENCES

### Category: (1)

<b>Faculty:</b> Science <b>Department:</b> Cellular, Anatomical & Physiological Sciences <b>Faculty Approval Date:</b> March 6, 2019	<b>Date:</b> March 6, 2019 <b>Contact Person:</b> Warren Williams <b>Phone:</b> 604-822-8719 <b>Email:</b> wwarren@mail.ubc.ca
<b>Effective Date for Change:</b> 19S <b>Proposed Calendar Entry:</b>  <b>CAPS 210 (3) Exploring the Human Body: How the body works</b>  <b>Basic functional anatomy and physiology of the human body. Not open to students who: a) have credit for Biology 12, Anatomy and Physiology 12, or any first year BIOL course or b) are in the Faculties of Science, Land and Food Systems, Pharmaceutical Sciences, or School of Kinesiology [3-0-1].</b>  <b>Prerequisites:</b> None	<b>Present Calendar Entry:</b>  <b>Action:</b> New Course  <b>Rationale:</b> The course is designed for UBC students studying for a degree in the Faculty of Arts that require science credits or for other non-science majors interested in this subject as an elective. Currently, UBC does not offer any courses on human anatomy and physiology for non-science majors that have little to no background knowledge of this discipline. This course will benefit these students by allowing them to obtain a better understanding of how the human body works and thus common health related issues.  This course is offered primarily online to provide students maximum flexibility for their course scheduling, with a weekly tutorial.

## COMPUTER SCIENCE

### Category: (1)

<b>Faculty:</b> Science <b>Department:</b> Computer Science <b>Faculty Approval:</b> March 6, 2019	<b>Date:</b> March 6, 2019 <b>Contact Person:</b> Warren Williams <b>Phone:</b> 604-822-8719 <b>Email:</b> wwarren@mail.ubc.ca
<b>Effective Date for Change:</b> 19S <b>Proposed Calendar Entry:</b>  <b>CPSC 203 (3) Programming, Problem Solving, and Algorithms</b>  <b>Analysis of increasingly complex algorithmic problems, using a modern programming language and a variety of approaches. Problem decomposition and abstraction guide</b>	<b>Present Calendar Entry</b>  <b>Action:</b> Create new course.  <b>Rationale:</b> The proposed course will serve as a second course for novice programmers. Designed for non-CS majors, it emphasizes practicality and productivity, without compromising the essentials of computer

<p><b>explorations of topics from applied algorithms, for example Voronoi Diagrams, Markov Chains, Bin Packing, and Graph Search. Not for students with credit for CPSC 210 or CPEN 221. [3-0-1]</b></p> <p><b>Prerequisite: One of CPSC 103, CPSC 110, EOSC 211, MATH 210, PHYS 210, COMM 337.</b></p>	<p>science—discussion of algorithmic efficiency and software engineering are woven into the curricular narrative throughout the course. In short, it answers the “now what?” question students ask after they complete an introductory course.</p>
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## FORENSIC SCIENCE

### Category: (1)

<p><b>Faculty:</b> Science  <b>Department:</b> Biochemistry &amp; Molecular Biology Sciences  <b>Faculty Approval Date:</b> March 6, 2019</p>	<p><b>Date:</b> March 6, 2019  <b>Contact Person:</b> Warren Williams  <b>Phone:</b> 604-822-8729  <b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Effective Date for Change:</b> 19S</p> <p><b>Proposed Calendar Entry:</b></p> <p>Forensic Science  ...  Completion of the requirements for the entire four- year specialization earns a Bachelor of Science (Combined Honours) in Biochemistry and Forensic Science. The credential is awarded jointly by UBC and BCIT. Students who fail to maintain the Faculty of Science requirements for continuing in honours specializations, or who elect not to complete the joint program, but who wish to enroll in a different specialization within the Faculty of Science must apply to receive transfer credit for completed BCIT credits to have the BCIT credits counted towards a new specialization.</p> <p><b>Co-operative (Co-op) Education Option</b></p> <p><b>The Biochemistry and Molecular Biology department offers an optional Co-op Education Option for the Biochemistry and Forensic Science Honours Program. The program is open to interested and qualified</b></p>	<p><a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,1614">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,1614</a></p> <p><b>Present Calendar entry:</b></p> <p>Forensic Science  ...  Completion of the requirements for the entire four- year specialization earns a Bachelor of Science (Combined Honours) in Biochemistry and Forensic Science. The credential is awarded jointly by UBC and BCIT. Students who fail to maintain the Faculty of Science requirements for continuing in honours specializations, or who elect not to complete the joint program, but who wish to enroll in a different specialization within the Faculty of Science must apply to receive transfer credit for completed BCIT credits to have the BCIT credits counted towards a new specialization.  ...</p>

students and is intended to provide additional practical and technical biochemical and molecular biological, and forensic science experience in academic, public, and industrial research laboratories or law enforcement agencies. This is normally achieved through a period of 12 to 15 months of approved work placement under the supervision of practicing professionals. Acceptance into the Co-op Option is based upon academic standing and general suitability to perform in a technical research environment. In order to graduate with the Co-op option students must complete a minimum of three work terms (a work term being a minimum of 14 weeks) in an academic research, public, or industrial laboratory or law enforcement agency (either at UBC or at an off-campus site). Placements are arranged by mutual agreement of the student, employer, and faculty advisor through the Office of Co-operative Education. Students participating in the Co-op Option must register for off-site placements by using FSCT 398, 399, 498 and, where appropriate, 499, and pay the co-op education program fee for each course. After completion of the work terms, students return to the University for completion of the normal fourth-year academic requirements. This option requires five years and is not a requirement for admission to the graduate program in biochemistry and molecular biology. Enrollment in the Co-op Education Option is limited; continuation in the option is contingent on the availability of suitable work placements. For more information contact the [Co-operative Education Program](https://sciencecoop.ubc.ca/) [link to: <https://sciencecoop.ubc.ca/>]

...

**Action:** General description of new Co-operative Education program for the Biochemistry and Forensic Science Honours Program, to be placed under the heading 'Co-operative (Co-op) Education Program' between

	<p>the description of the Biochemistry and Forensic Science Honours Program and the Specialization details in the Calendar.</p> <p><b>Rationale:</b> The Biochemistry and Forensic Science Honours Program attracts students who plan to seek employment in the field of forensics. It is therefore natural and in fact indispensable to give these students the option of entering a Co-operative Education Program so that they can explore more research and working options in industrial, academic and governmental settings.</p> <p><b>Supporting Documents:</b> <b>SCI-18-2-Co-operative (Co-op) Education Option</b></p>
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15 May 2019



Vancouver Senate  
THE UNIVERSITY OF BRITISH COLUMBIA

Docket Page 263 of 314  
Office of the Senate  
Brock Hall | 2016 - 1874 East Mall  
Vancouver, BC V6T 1Z1

Phone 604 822 5239  
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[www.senate.ubc.ca](http://www.senate.ubc.ca)

15 May 2019

To: Vancouver Senate  
From: Senate Curriculum Committee  
Re: May Certificate Proposals (information)

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Please find attached the following certificate program for your information:

*Graduate Certificate in Aquaculture*

Respectfully submitted,

Dr. Peter Marshall, Chair

Senate Curriculum Committee

**UBC Graduate Certificate in Aquaculture**

Summary Report to the Senate Curriculum Committee

**Proposed Name of Certificate Program:** Graduate Certificate in Aquaculture

**Date of Submission:** March, 2019

**Sponsoring Faculty/Department/School:** Land and Food Systems

**Contact Person:**

Name: Christine Scaman

Title: Associate Dean Academic

Telephone: 604-822-1804 Email: Christine.scaman@ubc.ca

**Supporting UBC Partners or External Partners:**

Fisheries and Oceans Canada

**Program Description** (maximum 250 words):

The Graduate Certificate in Aquaculture is a one semester, 16 credit specialized program for students interested in entering the aquaculture industry.

The program explores principles across the broad scope of fields involved with food production from aquaculture. Subjects include fish health, aquaculture production systems, fish nutrition, ecological sustainability, breeding and genetics, seafood processing, and basic aquaculture business concepts.

Students who complete this program will have increased access to some of the many careers in the rapidly growing aquaculture field. These include aquaculture entrepreneurs, technologists, researchers, and managers, as well as a variety of jobs in fish feed production, equipment design and supply, fish health services, fish processing, and aquaculture regulation and certification.

**Rationale for the Program** (maximum 250 words):

Aquaculture is one of the fastest growing food production sectors in the world. The production of farmed fish has surpassed that of farmed beef and that of wild fish globally. Unfortunately, Canada has not kept pace with this global growth in the industry, and production levels have seen little growth over the past two decades. Nevertheless, Canada is the world's fourth largest farmed salmon producer.

Technologies are continually advancing and new types of culture systems are being implemented in Canada and globally. One weakness in the industry in North America is the lack of expertise, and lack of trained people entering the industry.

**Proposed Length/Duration** (indicate hours, credits, months, etc.):

This program is proposed to be taken in one semester, starting in September and finishing at the beginning of December. The program will have courses totaling 16 credits. There will be



192 classroom hours, and a total of 246 hours including field trips. Course will only be available to students registered in the Certificate.

**Proposed Program Learning Outcomes**

The goal of the Aquaculture Certificate Program is to develop in students a theoretical and practical understanding of biological, technical, environmental, social, regulatory and economic aspects of aquacultural food production. This will prepare students for employment in business, government or non-government organizations, or for advanced study in the field of aquaculture.

Upon completion of the Graduate Certificate of Aquaculture students will be able to:

1. Critically evaluate and propose solutions to problems in the aquaculture area from a variety of perspectives in a professional and ethical manner.
2. Use information from scholarly, government and industry sources to address challenges in aquaculture.
3. Understand the relationship and role of government agencies, fish processors, hatcheries, feed mills and production companies.
4. Develop a perspective of the social and economic issues and opportunities related to aquaculture in British Columbia and Canada.
5. Demonstrate that they work effectively with others.
6. Demonstrate that they communicate information effectively in oral and written formats.

**Proposed Curriculum Topics (list by brief descriptive titles only):**

- Aquaculture Production Systems
- Fish Health
- Finfish Genetics and Reproduction
- Aquaculture Nutrition, Feeds and Feeding
- Ecological Sustainability of Aquaculture
- Seafood Processing
- Business Concepts in Aquaculture

**Target Learners:**

The intended audience for this program are graduates from a biology or science program who are interested in pursuing a career in one of the many branches in the aquaculture field such as fish production facilities, feed producers, and government labs. We anticipate a maximum enrolment of between 15- 25 students.

**Student Admission Criteria:**

Students admitted to the Aquaculture Certificate Program should have a Bachelor of Science degree. Other degrees, such as Bachelor of Applied Science, will be considered on a case by case basis. Students should submit an application form, transcripts from all academic institutions attended, and a personal written statement explaining why they are seeking enrolment in the Aquaculture Certificate Program.

Students must meet the standards of proficiency in English of the other graduate programs offered within the Faculty of Land and Food Systems.

**Student Assessment/Grading Methods:**

Students will be graded on a numeric basis. The minimum passing grade in any course taken by a student enrolled in the certificate is 60%. However, only 3 credits of courses with grades in the C to C+ range (60-67%) may be counted towards the certificate. For all other courses, a minimum of 68% must be obtained.

Assessment varies between courses, and will include quizzes, exams, oral presentations, individual projects, and group projects.

**Program Delivery Format:**

The program will be delivered via in-class lectures, guest lectures, hands-on experience with live fish at the Oceans and Fisheries Canada facilities (West Vancouver), and field trips to existing aquaculture facilities. Trip locations will include a fish hatchery, net-pen farm, land-based farm, aquaponics farm, research institute, feed mill, and processing plant.

**Marketing/Promotion Strategy:**

A web-based marketing program will be developed. The program will be marketed to students nearing completion of their undergraduate degrees from universities across Canada and internationally. The program will also be marketed to the aquaculture industry in Canada.

**Assessment of Impact on Departmental and University Resources:**

Classroom space and administrative support will be required for this program. No new full-time faculty are required. Instructors will come from existing faculty, adjunct professors, and sessional instructors from academia, industry, and government. A program coordinator will be hired.

**Assessment of Financial Viability:**

It is anticipated that the program will be financially viable by year 3 through tuition fees. For the first years, start up financing is being sought from government and industry sources. Any funding shortfall will be covered by the Faculty of Land and Food Systems.

**Current Program Advisory Committee Members (list names and affiliations):**

- Food, Nutrition and Health Program, LFS:
  - David Kitts Associate Dean Research;
  - Zhaoming Xu, Associate Dean Graduate and Post-Doctoral Studies
- Justin Henry, MSc - Henry Aquaculture Consult Inc
- Dr. Steve Macdonald, Head, Freshwater Ecosystems Section, Dept of Fisheries and Oceans

**Final Approval Expected from the Following Deans/Department Heads:**

Dr. Rickey Yada, Dean of the Faculty of Land and Food Systems

## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> March 5, 2019 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2019	<b>Date:</b> Aug 2018 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> Christine.scaman@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>Graduate Certificate in Aquaculture</b>  <b>Program Overview</b>  The Graduate Certificate in Aquaculture is a 4-month, 16 credit specialized program that will prepare students with the necessary skills and knowledge for careers in the aquaculture and related industries.  <b>Admissions Requirements:</b>  Applicants to the Graduate Certificate in Aquaculture must meet the minimum requirements of the Faculty of Graduate Studies for a <u>Master's degree</u> ( <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,340,182">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,340,182</a> ) as follows: <ul style="list-style-type: none"> <li>• Completion of a recognized Bachelor of Science at an accredited academic institution. Applicants who have completed a Bachelor of Applied Science will be considered on a case-by-case basis</li> <li>• Academic standing of a minimum 76% (B+) average in 300- and 400-level,</li> </ul>	<b>URL:</b> New URL required  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create a new calendar entry to describe the proposed Graduate Certificate in Aquaculture (overview of the certificate, the program requirements and the admission requirements for students)  <b>Rationale for Proposed Change:</b>  According to Fisheries and Oceans Canada, the BC aquaculture industry is responsible for more than half of Canada's aquaculture production, employs approximately 6000 people, with 740 aquaculture operations and has a total harvested value of \$534 million ( <a href="http://www.dfo-mpo.gc.ca/aquaculture/pacific-pacifique/index-eng.html">http://www.dfo-mpo.gc.ca/aquaculture/pacific-pacifique/index-eng.html</a> ). One weakness in the industry in North America is the lack of expertise,

<ul style="list-style-type: none"> <li>• with at least 12 credits of 300- and 400-level level courses in the A grade range (80% or higher at UBC) in the field of study presented.</li> <li>• Submission of an application form (from the website), official transcripts from all academic institutions attended, and a personal written statement explaining why the applicant is seeking enrolment in the Aquaculture Certificate Program.</li> <li>• English competency: Applicants from a university outside Canada for which English is not the primary language of instruction must present evidence of competency to pursue studies in the English language, prior to being extended an offer of admission. Acceptable English language proficiency tests for applicants are listed at <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,345,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,345,0</a> Note: these tests must have been taken prior to and within two (2) years of starting the program.</li> <li>• Recommended: completion of at least one course in each of Biology, Organic Chemistry, Calculus</li> </ul> <p><b>Program Requirements:</b></p> <p>Courses will be delivered on campus during the Winter Term 1 (September – December). Students will complete the certificate on a full-time basis over a period of 4 months, completing 7 required courses:</p> <ul style="list-style-type: none"> <li>• AQUA 501 (3)</li> <li>• AQUA 502 (2)</li> <li>• AQUA 503 (3)</li> <li>• AQUA 504 (2)</li> <li>• AQUA 505 (2)</li> <li>• AQUA 506 (2)</li> </ul>	<p>and lack of trained people entering the industry.</p> <p>The Graduate Certificate in Aquaculture was designed with input from the aquaculture industry and an aquaculture consultant. The program will complement existing educational programs in BC at North Island College (Technician Certificate, Technician Diploma) and Vancouver Island University (2 yr Diploma, 4 yr BSc, Post-Degree Diploma).</p> <p>The program will utilize expertise and facilities of industry, government, and UBC units (Institute for the Oceans and Fisheries, Food Science, Zoology).</p> <p>Application form and other materials will be available and submitted on-line, once the website pages for the Certificate are live. The anticipated date for this is May, 2019.</p>
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<ul style="list-style-type: none"> <li>• AQUA 507 (2)</li> </ul> <p><b><i>Definition of Satisfactory Progress</i></b></p> <p>The minimum passing grade in any course taken by a student enrolled in the certificate is 60%. However, only 3 credits of courses with grades in the C to C+ range (60-67%) may be counted towards the certificate. For all other courses, a minimum of 68% must be obtained.</p> <p>Where a failing grade is obtained in a course, on the recommendation of the Faculty's Associate Dean of Graduate Studies, the student may repeat a course for higher standing. If the Associate Dean does not make such a recommendation, the student will be required to withdraw. A student who obtains a grade of less than 68% in more than 3 credits will normally be required to withdraw for inadequate academic progress. <b>The student will be informed of unsatisfactory academic progress in writing before any action regarding withdrawal is taken.</b></p> <p>When repeating a failed course, a minimum mark of 74% must be obtained.</p> <p>If a course is repeated, both marks will appear on the transcript. The higher mark will be used to determine promotion in a program and in any decision to admit or withdraw a student from a program. For all other purposes, averages will be calculated using both marks.</p>	
<p><b>Proposed Calendar Entry:</b></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,194,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,194,0,0</a>  <b>Present Calendar Entry:</b>            (Cut and paste from the current web Calendar.)</p>

<h2>The Faculty of Land and Food Systems</h2>	<h2>The Faculty of Land and Food Systems</h2>
<h3>Contents</h3>	<h3>Contents</h3>
<a href="#">Introduction</a>	<a href="#">Introduction</a>
<a href="#">Admission</a>	<a href="#">Admission</a>
<a href="#">Registration and Program Approval</a>	<a href="#">Registration and Program Approval</a>
<a href="#">Academic Regulations</a>	<a href="#">Academic Regulations</a>
<a href="#">B.Sc. in Agroecology</a>	<a href="#">B.Sc. in Agroecology</a>
<a href="#">B.Sc. in Applied Biology (APBI)</a>	<a href="#">B.Sc. in Applied Biology (APBI)</a>
<a href="#">B.Sc. in Food, Nutrition, and Health</a>	<a href="#">B.Sc. in Food, Nutrition, and Health</a>
<a href="#">B.Sc. in Food and Resource Economics (FRE)</a>	<a href="#">B.Sc. in Food and Resource Economics (FRE)</a>
<a href="#">B.Sc. in Global Resource Systems</a>	<a href="#">B.Sc. in Global Resource Systems</a>
<a href="#">Dual Degree and Minor Options</a>	<a href="#">Dual Degree and Minor Options</a>
<a href="#">First Year Options</a>	<a href="#">First Year Options</a>
<a href="#">Co-operative Education Program</a>	<a href="#">Co-operative Education Program</a>
<a href="#">Exchange Programs</a>	<a href="#">Exchange Programs</a>
<a href="#">BC Institute of Agrologists</a>	<a href="#">BC Institute of Agrologists</a>
<a href="#">Dr. and Mrs. A. S. Dekaban Foundation</a>	<a href="#">Dr. and Mrs. A. S. Dekaban Foundation</a>
<a href="#">Academic Staff</a>	<a href="#">Academic Staff</a>
<a href="#">Graduate Certificate in Aquaculture</a>	

### Type of Action:

Adding Graduate Certificate in Aquaculture to LFS calendar entry

### Rationale for Proposed Change:

To accurately list the options available in LFS

To: Vancouver Senate  
From: Senate Library Committee  
Re: **Annual Report of the Senate Library Committee**

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As in previous years, 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.”

Our University Librarian, Susan Parker, has just completed her second full academic year at UBC, and the 11 branches of the Library are enjoying the incremental improvements she is instituting. There are many prestigious additions to the Library this year, which Ms. Parker will divulge in her Annual Report to Senate this October.

Over the 2018/2019 academic year, the Committee met five times. May 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, and offered guidance in the following areas:

- The Librarian’s Annual Report to Senate;
- The evening and extended hours of the Library;
- Library orientations for students;
- Open access and negotiations with publishers such as Elsevier in other university systems and jurisdictions;
- The development of the Library’s Strategic Plan;
- Tour of the Library Automated Storage and Retrieval System;
- Tour of the Rare Books and Special Collections Division;
- Results from the recent university-wide survey of the Library and its services.

In conclusion, the Committee wishes to record its appreciation of the assistance and information provided to it with unfailing courtesy and efficiency by UBC Librarians and other members of the Library staff, the Office of the Senate, and Enrolment Services, especially Laruen Small and Stephanie Oldford.

Respectfully submitted,

Dr. Lawrence Burr, Chair  
Senate Library Committee





1 May 2019

To: Senate

From: Senate Nominating Committee

Re: Appointments to Committees and the Council of Senates

1) Appointments to the newly-established Senate Research Committee

The Nominating Committee would thank all senators who expressed an interest in this committee. While it was not possible to meet all requests while ensuring reasonable disciplinary balance, the Nominating Committee would note that this proposed composition will only be for the remainder this triennium and senators who chose to return to Senate in 2020 will have a new opportunity to provide their committee preferences. The Committee's composition is for 11 senators, two of whom must be students (at least one preferably a graduate students) and one a convocation member. After a consideration of nominees, the Committee is pleased to recommend that Senate resolve as follows:

*That Dr Victoria Bungay, Dr Guy Faulkner, Dean John Innes, Dr Paul Keown, Dr Merje Kuus\*, Dr Philip Loewen, Dr Theresa Rogers, Dr Mark Thachuk, and Dr John Shepherd be appointed to the Senate Research Committee until 31 August 2020 and thereafter until replaced.*

\*The Nominating Committee would note that while Dr Kuus is a member of the Committee, she recused herself from consideration of this matter.

2) Appointments to a President's Advisory Committee for the Selection a Vice-President Human Resources

The President has informed the Registrar that Ms Barbara Means Thistle has resigned as Vice-President Human Resources effective 1 July 2019. The Nominating Committee would thank Ms Means Thistle for her service to the University. In accordance with Policy 34, a President's Advisory Committee has been struck to recommend a new vice-president, and the Senate is to appoint a faculty member (not necessary from Senate). In consideration of this appointment, the Nominating Committee is of the opinion that an academic department head with human resources or staff development background would be most helpful. After a consideration of nominees, the Committee is please to recommend that Senate resolve as follows:



*That Dr Vanessa Auld be (Professor and Head, Zoology) appointed to the President's Advisory Committee for the Selection of a Vice-President Human Resources.*

### 3) Committee and Council Assignments

The Nominating Committee has considered recommendations for committee assignments as made collectively by the students through their caucus and is pleased to endorse the recommendations made by the students. Additionally, a number of other appointments are being made consequentially to the establishment of the Senate Research Committee.

Therefore, the Nominating Committee is pleased to recommend:

*That Dr Simon Bates be appointed to the Senate Teaching and Learning Committee until 31 August 2020 and thereafter until replaced, to replace Dr Guy Faulkner;*

*That Dr Robert Boushel be appointed to the Senate Awards Committee until 31 August 2020 and thereafter until replaced, to replace Dr Merje Kuus*

*That Ms Lillian Milroy and Mr Riley Ty be appointed to the Senate Academic Building Needs Committee until 31 March 2020 and thereafter until replaced, to replace Ms Katie Gourlay and Mr Christian Surniawan;*

*That the appointment of Mr Nick Pang to the Senate Academic Building Needs Committee be extended until 31 March 2020 and thereafter until replaced;*

*That Ms Alexa Tanner be appointed to the Senate Academic Policy Committee until 31 March 2020 and thereafter until replaced, to replace Ms Jeanie Malone;*

*That the appointment of Mr J. Maximilian Holmes to the Senate Academic Policy Committee be extended until 31 March 2020 and thereafter until replaced;*

*That Mr Chris Hakim and Ms Natasha Rygnestad-Stahl be appointed to the Senate Admissions Committee until 31 March 2020 and thereafter until replaced, to replace Mr Alexander Starr and Ms Hannah Xiao;*



*That Mr Nick Pang be appointed to the Senate Agenda Committee until 31 March 2020 and thereafter until replaced, to replace Mr Jakob Gattinger;*

*That the appointment of Mr J. Maximilian Holmes to the Senate Agenda Committee be extended until 31 March 2020 and thereafter until replaced;*

*That Mr Christian Surniawan, Mr Temitope Onifade, and Mr Riley Ty be appointed to the Senate Appeals on Academic Standing Committee until 31 March 2020 and thereafter until replaced, to replace Ms Priscilla Chan, Ms Amber Shilling and Mr Alexander Starr, with the proviso that those students being replaced shall remain members of the Committee until any matters for which they are currently seized are resolved;*

*That Ms Julia Chai and Ms Evan Zusman be appointed to the Senate Awards Committee until 31 March 2020 and thereafter until replaced, to replace Ms Katie Gourlay and Mr Matthias Leuprecht;*

*That Mr Dante Agosti-Moro, Mr Alex Gonzalez, and Ms Julia Chai be appointed to the Senate Curriculum Committee until 31 March 2020 and thereafter until replaced, to replace Ms Priscilla Chan, Mr Quentin Golsteyn, and Ms Amber Shilling;*

*That Ms Lillian Milroy, Mr Riley Ty, Ms Vivian Tsang, and Mr Temitope Onifade be appointed to the Senate Library Committee until 31 March 2020 and thereafter until replaced, to replace Ms Vivian Braithwaite, Mr Austin Chen and Ms Samatha Gilbert, and to fill a vacancy;*

*That Ms Alexa Tanner and Mr Matthias Leuprecht be appointed to the Senate Research Committee until 31 March 2020 and thereafter until replaced, to fill vacancies;*

*That Ms Natasha Rygnestad-Stahl, Mr Matthias Leuprecht, and Mr Dante Agosti-Moro be appointed to the Senate Student Appeals on Academic Discipline Committee until 31 March 2020 and thereafter until replaced, to replace Ms Samatha Gilbert, Ms Alexa Tanner, and Mr Christian Surniawan, with the proviso that those students being replaced shall remain members of the Committee until any matters for which they are currently seized are resolved;*

*That Ms Evav Suzman, Mr Alex Gonzalez, and Mr Matthias Leuprecht be appointed to the Senate Teaching and Learning Committee until 31 March 2020 and thereafter until replaced, to replace Mr J. Maximillian Holmes, Mr Matthias Leuprecht, and Ms Alexa Tanner;*



*That Mr Christian Surniawan and Mr Nick Pang be appointed to the Senate Tributes Committee until 31 March 2020 and thereafter until replaced, to replace Mr Quentin Golsteyn, and Mr Alexander Starr;*

*That Mr Alex Gonzalez and Ms Julia Burnham be appointed to the Senate Ad Hoc Committee on Academic Diversity and Inclusion until 31 March 2020 and thereafter until replaced, to replace Ms Marium Hamid and Ms Jeanie Malone;*

*That Ms Vivian Tsang and Mr Chris Hakim be appointed to the Council Budget Committee until 31 March 2020 and thereafter until replaced, to replace Ms Marium Hamid and Mr Matthias Leuprecht;*

*That Mr J. Maximillian Holmes be appointed to the Council Elections Committee until 31 March 2020 and thereafter until replaced, to replace Mr Jakob Gattinger; and*

*That Ms Julia Burnham be appointed to the Senate Vancouver Representative Committee Four until 31 March 2020 and thereafter until replaced, to replace Ms Jeanie Malone.*

15 May 2019

To: Vancouver Senate

From: Committee on Student Appeals on Academic Discipline

Re: **Annual Report to Senate (1 May 2018 – 30 April 2019) (information)**

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Members of the Committee:

- Mr. Tariq Ahmed (Chair)
- Dr. Perry Adebar
- Dr. Abby Collier
- Prof. Sue Grayston
- Dr. Mieke Koehoorn
- Prof. C.W. Marshall
- Ms. Susan Parker
- Mr. Mike Stewart
- Ms. Samantha Gilbert (student)
- Mr. Christian Surniawan (student)
- Ms. Alexa Tanner (student)

The Senate Committee on Student Appeals on Academic Discipline is a standing committee of the Vancouver Senate established under section 37(1)(v) of the *University Act*, R.S.B.C. 1996, c. 468. The Senate Committee is the “standing committee of final appeal for students in matters of academic discipline.”

Under section 61(1) of the *Act*, the “president has power to suspend a student and to deal summarily with any matter of student discipline.” Under section 61(2), the President “must promptly report the action of the standing committee established under section 37(1)(v) with a statement of his or her reasons.” Under section 61(3), the “action of the president is final and subject in all cases to an appeal to the Senate.”

Student discipline is governed by the Academic Regulations section of the UBC Calendar. The rules and procedures of the Senate Committee on Student Appeals on Academic Discipline can be found at <https://senate.ubc.ca/vancouver/rules/discipline>.

## Appeals Heard

During the period from 1 May 2018 to 30 April 2019, the Senate Committee heard eight appeals involving students disciplined by the President upon the recommendation of the President’s



Advisory Committee on Student Discipline (the “PACSD”) or an investigator appointed pursuant to Board of Governors Policy 131.

Four appeals were dismissed, two appeals were allowed and one appeal was allowed in part.

The table below presents the Senate Committee’s workload and the outcomes of appeals heard over the past five years:

<b>YEAR</b>	<b>Academic</b>		<b>Non-Academic</b>		<b>Policy 131</b>		<b>TOTAL</b>
<i>RESULT<sup>1</sup></i>	<i>Allowed</i>	<i>Dismissed</i>	<i>Allowed</i>	<i>Dismissed</i>	<i>Allowed</i>	<i>Dismissed</i>	
2014-15	2	2	0	0	N/A	N/A	<b>4</b>
2015-16	1	4	0	1	N/A	N/A	<b>6</b>
2016-17	1	2	0	2	N/A	N/A	<b>5</b>
2017-18	0	2	0	0	N/A	N/A	<b>2</b>
2018-19	1	3	1	0	1	2	<b>8</b>
<b>TOTAL</b>	<b>5</b>	<b>12</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>24</b>

The misconduct, the disciplinary actions taken by the President, the nature of the appeals and the decisions of the Senate Committee are as follows:

### **1. 24 May 2018**

The student was disciplined for sexual misconduct. The discipline imposed by the President was expulsion from the University, a prohibition on reapplying to the University, and the entry of a permanent record of the disciplinary action on the student’s academic transcript.

The student argued that the procedure of the PACSD was unfair or operated unfairly in that the PACSD failed to provide the student with proper or adequate notice of the proceedings. The student was advised of the PACSD proceedings only by way of email to an account which the student no longer used.

The standard of review applicable to this ground of appeal is whether a reasonable person, knowledgeable about the facts would perceive the process at or before the PACSD to be unfair. The Office of University Counsel conceded that the standard of review had been met. The appeal was allowed and the matter referred back to the PACSD for a re-hearing.

**Appeal allowed.**

### **2. 18 June 2018**

The student was disciplined for submitting a Ph.D. dissertation that contained multiple plagiarized passages. The discipline imposed by the President was a notation of academic misconduct entered on the student’s transcript, and rescission of the student’s Ph.D. unless the student revised the dissertation to remove all aspects of plagiarism and the revised dissertation

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<sup>1</sup> “Allowed” includes those appeals that were allowed in part.



was reviewed and approved by a re-constituted supervisory committee and by the Faculty of Graduate and Postdoctoral Studies.

The student raised four grounds of appeal:

- a. The President incorrectly determined that the conduct amounted to misconduct or the President incorrectly applied a University policy or procedure;
- b. There was material evidence not reasonably available at the time of the PACSD hearing;
- c. There was a breach or unfair application of the University's procedure prior to the PACSD hearing; and
- d. The discipline imposed was excessive.

*A. Appeal on the Ground that the President Incorrectly Determined that the Conduct Amounted to Misconduct or the President Incorrectly Applied a University Policy or Procedure*

The student argued that the President erred in imposing discipline in this case as the student had graduated by the time the misconduct was discovered and, in the student's submission, the University's disciplinary process no longer applied to the student.

The standard of review applicable to this ground of appeal is correctness. The Senate Committee may reverse or vary the President's decision or substitute its own decision if it disagrees with the President's determination or application of a university policy or procedure.

The Senate Committee concluded that there was no error as asserted by the student. The University's disciplinary processes continue to apply to students following graduation provided the misconduct alleged took place during the student's academic career at the University.

*B. Appeal on the Ground that there was Material Evidence Not Reasonably Available at the Time of the PACSD Hearing*

The student presented letters of recommendation written for a different purpose, taking the position that they were not available during the PACSD proceedings.

The standard of review applicable to this ground of appeal is whether the material evidence was not reasonably available at the time of the PACSD hearing and there is a substantial likelihood that it would have affected the outcome.

The Senate Committee noted that all of the letters in issue were dated prior to the student's submission to the PACSD, and as such were reasonably available at that time. Additionally, as there was no indication that the authors of the letters were aware of the alleged misconduct, the Senate Committee concluded that there was no substantial likelihood they would have changed the outcome of the hearing.



*C. Appeal on the Ground that there was a Breach or Unfair Application of the University's Procedure Prior to the PACSD Hearing*

The student argued that a number of contextual factors including a job offer received prior to submission of his final dissertation, the student's family situation, and the positive response to his academic work, resulted in an unfair application of the University's procedure. The job offer at issue required that the student's dissertation be submitted under very tight timelines, while the personal issues experienced by the student were personally disturbing.

The standard of review applicable to this ground of appeal is whether a reasonable person, knowledgeable about the facts, would perceive the process at or before the PACSD to be unfair.

Despite the impact these circumstances may have had on the student, the Senate Committee concluded that they did not amount to reasonable grounds for committing academic misconduct, and did not amount to an unfair application of the University's process.

*D. Appeal on the Ground that the Discipline Imposed was Excessive*

The student took the position that the discipline imposed by the President was excessive because it held the potential to have a disproportionate impact on the student's career prospects.

The standard of review applicable to this ground of appeal is whether the President's exercise of discretion with respect to the academic discipline imposed was unreasonable.

The Senate Committee concluded that the exercise of the President's discretion was not unreasonable. The Senate Committee noted, however, that the President did not have the jurisdiction to rescind a degree directly. Only the Senate may rescind a degree. The President may submit a request that Senate do so. The Senate Committee modified the decision of the President accordingly.

**Appeal allowed in part.**

### **3. 22 August 2018**

The student was disciplined by the President for sexual misconduct under Board of Governors Policy 131: Sexual Assault and Other Sexual Misconduct. The discipline imposed by the President was suspension from the University for a period of 18 months, a prohibition on graduation until the suspension had expired, and the entry of a notation of non-academic misconduct on the student's academic transcript. A prohibition from access to the Point Grey campus for the duration of the suspension and a direction that the student not have any communication or contact with the complainant was also imposed.

The student raised two grounds of appeal:

- a. There was a breach or unfair application of the University's procedures; and
- b. The discipline imposed by the President was excessive.





*A. Appeal on the Ground that there was a Breach or Unfair Application of the University's Procedures*

The student took the position that there had been a breach or unfair application of the University's procedures. The student raised five issues under this ground of appeal. First, the student argued that the investigation conducted under Policy 131 was unfair because the student was not provided with an in-person hearing and an opportunity to cross-examine the complainant. Second, the student took the position that because the University had not provided adequate support to the student during the investigation and instead placed restrictions on the student that limited his ability to participate in his program, it had failed to fulfill its obligation under paragraph 1.7 of Policy 131. Third, the student contended that the investigation was not completed in a timely manner. Fourth, the student submitted that the student had not been sufficiently informed of the allegations made or provided a meaningful opportunity to respond. Finally, the student argued that the reasons provided by the President were insufficient.

The standard of review applicable to this ground of appeal is whether a reasonable person, knowledgeable about the facts, would perceive the process to be unfair. The Senate Committee concluded that there had not been a breach or unfair application of the University's procedures.

The Senate Committee concluded that the student was entitled to, and received, a high degree of procedural fairness. With respect to the first issue, Policy 131 does not permit that hearings be held as part of the investigative process and, as consistent with the Supreme Court of Canada's decision in *Baker v. Canada (Minister of Citizenship and Immigration)*, [1999] 2 S.C.R. 817, the procedural decisions made by the Board of Governors embodied in Policy 131 should be respected and were appropriately applied in this case. Regarding the second issue, while the Senate Committee accepted that restrictions were placed on the student that limited his ability to participate fully in his academic program, the University did demonstrate a willingness to modify these restrictions to meet the student's needs, ultimately permitting the student to complete his program while the investigation was ongoing. In doing so, the University met its obligation to provide support to the student during the investigation. Regarding the third issue, the Senate Committee concluded that the time in which the investigation was completed was not unreasonable, given the nature of the allegations and the complexity of the matter. As required by Policy 131, the student was notified by the investigator that the 60-calendar day guideline for completion of the investigation would not be met, and the investigator's explanation for the delay was not unreasonable. Strict adherence to the 60-day guideline in this case may have resulted in unfairness to the student. With respect to the fourth issue, the Senate Committee concluded that the student was fully informed of the allegations, and provided ample opportunity to respond. Finally, the Senate Committee concluded that the President's reasons, including the evidence and findings set out in the investigation report, which were adopted by the President, were sufficient.

*B. Appeal on the Ground that the Discipline Imposed by the President was Excessive*

The second ground of appeal raised by the student was that the discipline imposed by the President was excessive. The student argued that the discipline imposed was excessive because



the investigator had rejected some of the aggravating elements of the allegations against the student, and because the misconduct found by the President lacked certain exacerbating features that characterize the most serious allegations of sexual misconduct. The student took the position that the President should have applied disciplinary measures that were more restorative in nature.

The standard of review applicable to this ground of appeal is reasonableness. The Senate Committee may reverse or vary the President's decision or substitute its own decision only if the exercise of the President's discretion with respect to the discipline imposed is unreasonable.

The Senate Committee concluded that the exercise of the President's discretion with respect to the discipline imposed was not unreasonable. The misconduct found by the President was not trivial, and the discipline imposed, while significant, was not the most onerous penalty available to the President. That the discipline imposed had a substantial impact on the student's personal, academic and professional life does not render it unreasonable.

### **Appeal dismissed.**

## **4. 22 August 2018**

The student was disciplined by the President for sexual misconduct under Board of Governors Policy 131: Sexual Assault and Other Sexual Misconduct. The discipline imposed by the President included a suspension from the University for a period of eight months, and the entry of a notation of non-academic misconduct on the student's academic transcript. A prohibition from access to the Point Grey campus for the duration of the suspension and a direction that the student not have any communication or contact with the complainant was also imposed.

The student had admitted the misconduct prior to the President's decision. The sole ground of appeal raised by the student was that the discipline imposed by the President was unreasonable.

The student argued that the discipline imposed was unreasonable because the President erred in his assessment of the evidence, because the punishment was excessive when viewed in light of the whole of the circumstances including the nature of the misconduct and the student's background, because the President imposed punitive rather than remedial punishment, and because the President failed to give due regard to the student's acceptance of responsibility at the first opportunity and his apology to the complainant.

The standard of review applicable to this ground of appeal is reasonableness. The Senate Committee may reverse or vary the President's decision or substitute its own decision only if the exercise of the President's discretion with respect to the discipline imposed is unreasonable.

The Senate Committee found that the exercise of the President's discretion with respect to the discipline imposed was reasonable and dismissed the appeal. In light of the serious nature of the misconduct, the student's personal circumstances, and his apology and early admission of responsibility, an eight-month suspension was well within the range of reasonable disciplinary measures available to the President. While there is no requirement that the President impose



discipline with a focus on remediation, the discipline imposed in this case did include rehabilitative elements, including the temporary nature of the transcript notation, and the President's suggestion that the student reflect on his conduct and offer of assistance in accessing support services.

**Appeal dismissed.**

**5. 24 September 2018**

The student was disciplined by the President for sexual misconduct under Board of Governors Policy 131: Sexual Assault and Other Sexual Misconduct. The discipline imposed by the President was expulsion from the University and a prohibition on reapplication to the University, and a permanent record of the disciplinary action on the student's transcript. The student was not granted academic credit for courses completed while studying on exchange at UBC.

The student raised a number of grounds of appeal, including that the Director of Investigations unreasonably declined to grant an adjournment of the Policy 131 investigation, that it was unreasonable that the student was not given an opportunity to respond to the completed investigation report, that it was unreasonable that the student was not given an opportunity to cross-examine the complainant, that the President and investigator applied the wrong standard of proof and that the President erred in failing to provide reasons for adopting the investigation report.

The standard of review applicable to this ground of appeal is whether a reasonable person, knowledgeable about the facts, would perceive the process to be unfair.

The Senate Committee allowed the appeal on the basis that the process followed prior to or during the investigation was unfair in that the decision of the Director of Investigations declining to grant an adjournment of the investigation as requested by the student was not made in accordance with Policy 131. While Policy 131 requires that the Director of Investigations consult with the complainant regarding a possible adjournment, the Senate Committee found that the Director had fettered her discretion by simply acceding to the complainant's position without giving due consideration to the student's interests. As the student's request for an adjournment was related to ongoing parallel proceedings that could curtail his ability to participate in the investigation, the student had a compelling interest in an adjournment that ought to have been considered by the Director of Investigations.

**Appeal allowed.**

**6. 11 January 2019**

The student was disciplined by the President for academic misconduct consisting of self-plagiarism on a final examination, improperly collaborating with other students on a final examination, and dishonesty relating to these acts. The student had previously been disciplined for a separate act of misconduct. The discipline imposed by the President was a mark of zero in the course, suspension for a period of 12 months, and a notation of academic misconduct on the



student's transcript. In order to continue studying at the University following the suspension, the student was required to take concrete steps to identify and address the circumstances that contributed to the misconduct and to document those steps.

The student raised four grounds of appeal:

- a. The procedure before the PACSD was unfair or operated unfairly;
- b. There was a breach or unfair application of the University's procedure prior to the PACSD hearing, that was not adequately remedied through the PACSD;
- c. The student had material evidence not reasonably available at the time of the PACSD hearing; and
- d. The discipline imposed by the President was excessive.

*A. Appeal on the Ground that the Procedure Before the PACSD was Unfair or Operated Unfairly*

The student submitted that the faculty representative had improperly discussed matters related to the disciplinary proceedings with members of PACSD outside of a hearing and that the PACSD members asked improper questions at the hearing, indicating bias.

The standard of review applicable to this ground of appeal is whether a reasonable person, knowledgeable about the facts, would perceive the process to be unfair.

The Senate Committee dismissed this ground of appeal, concluding that the suggestion that anything untoward took place outside of the PACSD hearing was entirely speculative. That the PACSD members asked challenging questions of the student did not indicate bias and did not render the hearing unfair. The questions asked were clearly related to the alleged misconduct.

*B. Appeal on the Ground that there was a Breach or Unfair Application of the University's Procedure Prior to the PACSD Hearing, that was not Adequately Remedied through the PACSD*

The student submitted that the faculty had not provided a full opportunity for defense prior to referring the matter to the PACSD, and that the faculty member responsible for the matter was hostile and unhelpful. The faculty advised that the student had been provided with two meetings in which the opportunity to offer their version of events was offered. No information was presented that indicated that the matter should not proceed to the PACSD.

The standard of review applicable to this ground of appeal is whether a reasonable person, knowledgeable about the facts, would perceive the process to be unfair.

The Senate Committee dismissed the appeal on this ground. The procedure followed by the faculty was not unfair, and the student was provided an opportunity to explain his actions to the faculty. Further, the student did not raise this issue before the PACSD, which is required in order to raise this issue on appeal.



*C. Appeal on the Ground that the Student had Material Evidence not Reasonably Available at the Time of the PACSD Hearing*

The student provided the Senate Committee with evidence of communications with other students suggesting that those students believed that the examination instructions were unclear, and that the other students did not believe that they had cheated.

The standard of review applicable to this ground of appeal is whether the material evidence was not reasonably available at the time of the PACSD hearing and there is a substantial likelihood that it would affect the outcome.

The Senate Committee dismissed this ground of appeal on the basis that the evidence in question was reasonably available to the student at the time of the PACSD hearing and that the student could have presented it to the PACSD. The Senate Committee also concluded that the evidence was not likely to affect the outcome of the PACSD hearing.

*D. Appeal on the Ground that the Discipline Imposed by the President was Excessive*

The student submitted that the discipline imposed by the President was excessive, and indicated that other students involved in the incident had received lesser punishment. The standard of review applicable to this ground of appeal is reasonableness. The Senate Committee may reverse or vary the President's decision or substitute its own decision only if the exercise of the President's discretion with respect to the discipline imposed is unreasonable. The Senate Committee noted that the student's previous act of misconduct was an aggravating factor, and concluded that the discipline imposed in this case was not excessive.

**Appeal dismissed.**

**7.5 February 2019**

The student was disciplined by the President for academic misconduct consisting of the submission of a research proposal that contained material plagiarized from a previously published article. The discipline imposed by the President was a mark of zero in the course, suspension for a period of four months, and a notation of academic misconduct on the student's transcript.

The student raised three grounds of appeal:

- a. The procedure before the PACSD was unfair or operated unfairly;
- b. The President erred in his assessment of the evidence in the PACSD report; and
- c. The discipline imposed by the President was excessive.



*A. Appeal on the Ground that the Procedure Before the PACSD was Unfair or Operated Unfairly*

The student submitted that the procedures before the PACSD were unfair or operated unfairly because the PACSD ignored the role that the student's depression played in the academic misconduct, the PACSD did not consider that the course was a non-credit course, and the student was unable to fully participate in the PACSD proceeding due to a language barrier.

The standard of review applicable to this ground of appeal is whether a reasonable person, knowledgeable about the facts, would perceive the process to be unfair.

The Senate Committee dismissed the appeal on this ground. The PACSD report indicated that the PACSD did consider the student's mental health in reaching a decision, acknowledging that these issues likely contributed to his academic difficulties. While the course in which the plagiarism occurred was a credit course, not a non-credit course as asserted by the student, the Senate Committee concluded that this distinction was not relevant as academic honesty is integral to the University's function and should be observed in all academic work, regardless of the nature of the course or program. Finally, there was nothing in the materials before the Senate Committee that indicated that the student had difficulty participating in the PACSD hearing. The PACSD was alive to the relevant issues and gave them due consideration.

*B. Appeal on the Ground that the President Erred in his Assessment of the Evidence in the PACSD Report*

The student submitted that the President erred in assessing the evidence in the PACSD report. The standard of review applicable to this ground of appeal is reasonableness. The Senate Committee dismissed the appeal on this ground. While the student may have disagreed with the President's assessment of the evidence, it was not unreasonable.

*C. Appeal on the Ground that the Discipline Imposed by the President was Excessive*

The student submitted that the discipline imposed by the President was excessive. The standard of review applicable to this ground of appeal is reasonableness. The Senate Committee may reverse or vary the President's decision or substitute its own decision only if the exercise of the President's discretion with respect to the discipline imposed is unreasonable. The Senate Committee dismissed the appeal on this ground. The discipline imposed in this case was not unusual for academic misconduct of the sort committed by the student and was not unreasonable.

**Appeal dismissed.**

## **8. 25 February 2019**

The student was disciplined by the President for academic misconduct consisting of the submission of plagiarized material. The discipline imposed by the President was a mark of zero



in the course, suspension for a period of four months, and a notation of academic misconduct on the student's transcript.

The student raised three grounds of appeal:

- a. The procedure before the PACSD was unfair or operated unfairly;
- b. The student had material evidence not reasonably available at the time of the PACSD hearing; and
- c. The discipline imposed by the President was excessive.

*A. Appeal on the Ground that the Procedure Before the PACSD was Unfair or Operated Unfairly*

The student submitted that the PACSD process was unfair due to what the student viewed to be inadequate assistance in preparing written materials by an advocacy service engaged by the student to assist with the PACSD hearing, and inadequate assistance from a translator at the PACSD hearing.

The standard of review applicable to this ground of appeal is whether a reasonable person, knowledgeable about the facts, would perceive the process to be unfair.

The Senate Committee dismissed the appeal on this ground. The Senate Committee concluded that there was nothing before it to support the contention that the translator had not adequately served the student. Further, while the student may have had concerns about the adequacy of the assistance received from the advocacy service, this did not render the hearing unfair. The student had the opportunity to correct or clarify her position in the course of the hearing.

*B. Appeal on the Ground that the Student had Material Evidence not Reasonably Available at the Time of the PACSD Hearing*

The student did not strenuously pursue this ground of appeal at the hearing. The standard of review applicable to this ground of appeal is whether the material evidence was not reasonably available at the time of the PACSD hearing and there is a substantial likelihood that it would affect the outcome. The Senate Committee concluded that there was no material evidence that could not have been adduced at the PACSD hearing that was likely to have affected the outcome.





*C. Appeal on the Ground that the Discipline Imposed by the President was Excessive*

The student submitted that the discipline imposed by the President was excessive, and provided examples of past discipline cases in which, the student submitted, it appeared that the same or lesser punishment was imposed for more severe misconduct.

The standard of review applicable to this ground of appeal is reasonableness. The Senate Committee may reverse or vary the President's decision or substitute its own decision only if the exercise of the President's discretion with respect to the discipline imposed is unreasonable.

The Senate Committee dismissed this ground of appeal, concluding that the President's decision to impose a different penalty in other cases does not render the discipline imposed in this case unreasonable. The Senate Committee noted that though the assignment in question was for a relatively small portion of the course grade, academic honesty is at the core of the University's function and plagiarism is a serious form of academic misconduct that calls for significant penalties.

**Appeal dismissed.**

**General Comments**

The Senate Committee also provides general comments from its work over the past year:

- The Senate Committee experienced a significant increase in its workload as compared to past years. In addition to an increase in the number of appeals heard, the appeals of discipline imposed under Policy 131 tended to be particularly complex and involved more extensive submissions than other appeals.
- Despite the fact that the Senate Committee is an appellate tribunal and does not re-hear matters, on some occasions it appears that the student may view the Senate Committee appeal hearing as an opportunity to have the matter heard anew. This is not the case, and highlights the importance that should be accorded to earlier stages of the discipline process by participants.
- Two of the appellants in academic discipline appeals claimed that they had difficulties presenting their cases before the PACSD due to language issues. While the Senate Committee did not conclude that the PACSD process was rendered unfair in either case, given that the claim was made twice in recent appeals, the Senate Committee wanted to draw attention to the issue.

Respectfully submitted,

Tariq Ahmed, Chair  
Senate Committee on Student Appeals on Academic Discipline



3 May 2019

To: Vancouver Senate

From: Senate Teaching and Learning Committee

Re: UBC Principles for Digital Learning Materials Used for Assessment (endorsement)

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The Committee has reviewed and recommends to Senate for endorsement Principles for Digital Learning Materials Used for Assessment.

In May 2018, the Committee presented to Senate on this issue as a 'Topic of Broad Academic Interest.' The draft principles presented for discussion at that time has since been further developed and refined.

As outlined in the attached document, the principles are designed to address compulsory, non-tuition-related ancillary fees for access to learning materials as a condition for assessment in UBC courses. Currently, there is no University policy or provincial regulations in place, though such policy and/or regulations may be mandated in the near future. Guidelines relating to cost and use of digital materials for assessment purposes exist for post-secondary institutions in other jurisdictions, namely Alberta and Ontario, and have informed the development and content of the proposed UBC guidelines. Development of these principles allows UBC to be at the forefront of discussion related to this issue and provides guidelines which can inform future policy development.

The Committee recommends as follows:

***Motion: That Senate endorse the UBC Principles for Digital Learning Materials Used for Assessment.***

Respectfully submitted,  
Prof. André Ivanov, Chair  
Senate Teaching and Learning Committee

# Proposed UBC Principles for Digital Learning Materials Used for Assessment

## Prepared by:

Will Engle, Open Strategist, CTLT  
Christina Hendricks, Academic Director, CTLT  
Max Holmes, AMS and Senate  
Joe Zerdin, Support Analyst, Emerging Technologies, CTLT  
Jennifer Stacey, Manager, UBC Bookstore

## Prepared for:

UBC Vancouver Senate, May 15, 2019

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The purpose of this document is to recommend principles to address compulsory, non-tuition-related ancillary fees for access to learning materials as a condition of assessment in UBC courses. Currently, neither UBC, nor the B.C. Provincial Government, have regulations and/or policies in place to reduce or limit the cost of digital learning materials. However, both the Governments of Ontario and Alberta have placed restrictions on the cost and use of digital materials used for assessment purposes and the following principles have been informed by the guidelines and practices of institutions within those Provinces.

## Background

UBC is committed to academic freedom and recognizes that the use of digital learning materials and applications in UBC courses is based upon sound pedagogical practices that enhance student learning, experiences, and outcomes. The use of digital learning materials at UBC is widespread and includes the use of digital content, online discussion groups, classroom response systems, formative assessment tools such as online quizzes, electronic submissions of assignments and reports, fully online courses, and more.

Instructors have an increasing choice of UBC-provided learning technologies, open educational resources (OER), and other digital learning materials which may be used for assessment activities. Third-party vendors are also increasingly creating and improving digital materials that are being used for assessment activities. For example, [Macmillan Launchpad](#), which was used for marks by at least 13 UBC course sections in AY 2018-2019 Winter Term 2, includes a variety of prebuilt and adaptive quiz tools, video assessment tools, pre-built modules, homework submission functionality, and more.

The use of assessed third-party vendor digital learning materials differ from traditional learning materials. When a course includes a required textbook, it is the *content* of text that is required and not the specific textbook. Thus, students have agency in deciding on how they may access that content. For example, students have many options for how they access traditional text resources including purchasing older or used versions, buying or using alternative texts, renting the digital version of the text, sharing a text with a classmate, or possibly accessing reserve copies at the UBC Library. According to the [2018 AMS](#)

[Academic Experience Survey](#), 40 percent of UBC undergraduate respondents reported that they frequently or often used an outdated version of a textbook or other course resource to avoid paying for a more recent edition. Additionally 32 percent of undergraduate respondents reported they frequently or often went without a textbook or other course resource due to cost.

When the use of digital materials, which can only be accessed uniquely by each specific student, are required for course marks, this agency for how to access the course materials is removed. Packaging or bundling digital materials that are used for assessment with non-assessed texts also takes away the agency from students to choose how they purchase or access the non-assessed materials.

When an instructor chooses to use digital materials or platforms provided by UBC, the use of those materials are included within student tuition; however, when instructors choose third-party vendor tools for assessment activities, access and use of those materials may represent an additional student fee beyond tuition. According to the [2018 Teaching Practices Survey](#), 20 percent of instructors of courses with enrolments over 200 students, 21 percent of instructors of first year courses, and 12 percent of all responding instructors expect their students to purchase access to digital learning resources other than a textbook. In academic year 2018-2019, it is estimated that at least 10,000 UBC students paid between \$840,000 to \$1.25 million in aggregate for access to digital materials and platforms that were required for assessment in their courses (see Appendix 1 for digital materials use estimates). As the publisher provided digital materials improves and becomes easier to integrate with UBC's platforms, it is expected that these numbers will greatly increase.

The following principles were developed in consultation with members of the AMS, CTLT, and UBC Bookstore. They specifically address compulsory, non-tuition-related ancillary fees that students may be required to pay for access to digital learning materials and applications as a requirement for a course. They do not address materials not required as part of a course mark nor learning materials that become the property of the student and are retained beyond the completion of the course, such as textbooks, art supplies, software, hardware, or laboratory equipment.

## Principles

- **Costs to Students**

The costs of digital learning materials represent a real barrier to learning for students at UBC and it is recognized that the compulsory use of fee-based learning materials is financially burdensome for students. In principle, assessments in a course should be covered by tuition costs. In instances where there are pedagogical or logistical reasons for an instructor to choose third-party vendor materials for a portion of the assessment, the cost to students must not exceed \$65 per three-credit course.

- **Percentage of Course Marks**

The compulsory use of fee-based learning materials as a percentage of a course mark can impact equitable and inclusive learning. In instances where there are pedagogical or logistical reasons for an instructor to choose third-party vendor materials for a portion of the assessment, the use of those materials must not exceed 20% of a course mark.

- **Student Agency and Options**

Students should have agency, options, and the ability to make informed decisions about compulsory non-tuition-related fees for learning materials. Students should know the full cost of all courses at the time of or, ideally, before registration. Additionally, students must always have the option to purchase access to compulsory assessment materials or components unbundled from non-assessed materials and textbooks. Where vendor-based digital learning materials are used, student data and privacy must be protected and the use of such materials must comply with BC FIPPA laws.

- **Enhancement of Financial Support for Students for Learning Materials**

Assessment activities are a core part of tuition and the compulsory use of fee-based learning materials may prove financially onerous at any cost and percentage of a course mark. UBC should enhance and improve the financial support it provides to students so that compulsory fees for access to third party assessment materials are not a barrier for students to be fully assessed for course marks. Where costs are known in advance, students can add these to their bursary applications.

- **Institutional Support for Open Resources and Platforms**

UBC should continue to support the development and use of a wide range of open educational resources, digital materials, and learning technologies that can be used free of additional fees for students. Academic freedom is a core tenet of UBC's teaching and learning environment and UBC should continue to support, develop, and invest in digital learning materials and platforms that can support pedagogical best practices, enhancement of teaching and learning, and instructor freedom in how they teach without adding to the financial burdens of UBC students. In addition to licensing learning technologies such as Canvas, UBC should continue to invest in the development of open educational resources such as open textbooks, open tools, and open quiz and problem banks.

## Appendix 1: Estimated Use and Costs of Vendor-Provided Digital Materials

*Please note:* Information in this appendix was provided by the UBC Bookstore. The estimated amounts of digital materials being used for assessment are calculated from publisher integrations of online assessment components through Canvas. These materials may be packaged or bundled with textbooks or students may have the option to purchase the textbook separately from the assessed materials. Where possible, the UBC Bookstore will offer the full range of products that are available (i.e. access codes, text packages, or both) to allow students to have a full range of purchasing options. They research and offer these digital options when available, whether the instructor has asked for them or not.

Furthermore:

- If the digital material is not integrated into Canvas, it is unknown if, or how much of the digitals materials, get used. For example, instructors may use a publisher provided ISBN that includes a textbook with digital materials, but the instructor may not utilize the online components.
- These estimates do not include UBC-O data. As the functionality to integrate publisher provided assessment materials into Canvas expands, it is expected that these numbers will greatly increase.

AY2018-19 Canvas Integrated (Assessed) Materials Impacts:

Term	Number of Course Sections	Estimated Students Impacted	Estimated Total Cost Range	
			Bundled Package	Digital Only
Term 1 (Sept 2018)	31	4767	\$612,902.75	\$406,186.30
Term 2 (Jan 2019)	27	5273	\$636,784.20	\$435,700.30
<b>Totals</b>		<b>10,040</b>	<b>\$1,249,686.95</b>	<b>\$841,886.60</b>

AY 2018-19 Canvas Integrated (Assessed) Digital Materials Estimated Costs:

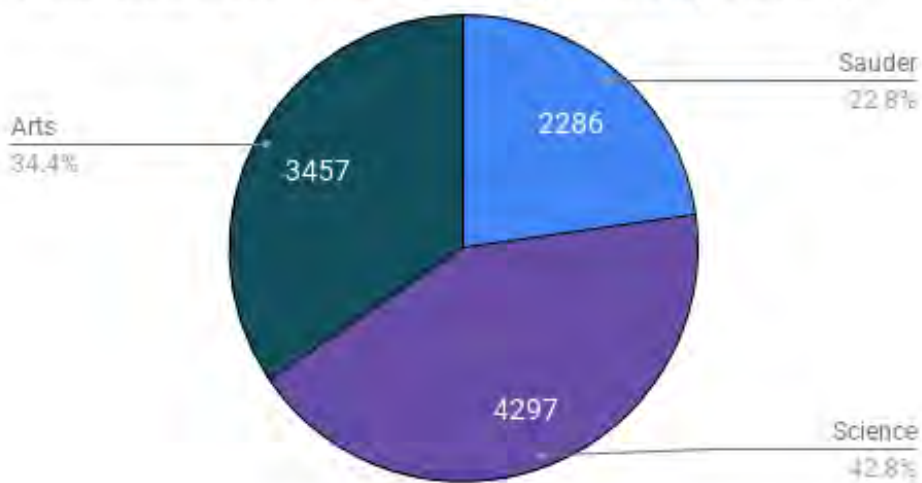
Cost Ranges	Average Price	Max Price	Min Price
Term 1 (Sept 2018) Digital Only	\$89.704	\$150.00	\$50.00
Term 1 (Sept 2018) Package	\$137.24	\$209.00	\$56.25
Term 2 (Jan 2019) Digital Only	\$84.15	\$150.00	\$50.00
Term 2 (Jan 2019) Package	\$122.74	\$209.00	\$56.25

## AY 2018-19 Non-Canvas Integrated Materials Estimated Costs:

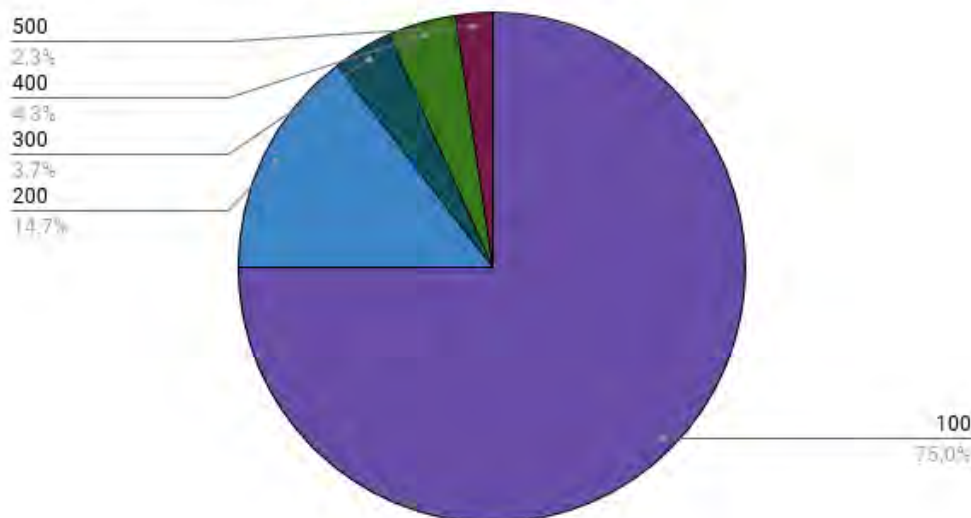
Cost Ranges	Average Price	Max Price	Min Price
Term 1 (Sept 2018) Digital Only	\$79.82	\$230.00	\$13.95
Term 1 (Sept 2018) Package	\$143.414	\$350.00	\$36.25
Term 2 (Jan 2019) Digital Only	\$79.40	\$141.60	\$19.95
Term 2 (Jan 2019) Package	\$140.54	\$240.00	\$42.00

## Appendix 2: Use of AY 2018 Digital Materials for Assessment by Faculty and Course Level:

Total Estimated Students Impacted by Faculty



Estimated Student Impact by Course Level



## Appendix 3: Frequently Asked Questions

### How did you arrive at the \$65 per three-credit course limit?

The limit was determined after conducting an environmental scan of peer institutions and existing provincial legislation, reviewing current costs of digital materials used for assessment, and the recognition that by setting a price cap, the costs of materials under the limit may be raised.

### If more than one digital learning resource is required per course, does the limit change?

No. The \$65 limit is currently a total cost for digital learning materials used in assessment per three credit course.

### What if the I teach a four-credit or two credit course?

The \$65 limit applies to three credit-courses, which are the most common types of courses at UBC. For courses that have more or less credits, the amount would be pro-rated. For example, the limit for a four credit course would be \$87 and a two credit course would be \$43.

### What if multiple courses are using the same digital materials?

If two three-credit courses are using the same materials, the cap would be \$130 across the six-credits.

### Why is there a limit for both the cost and the percentage of a course mark?

According to the [2018 AMS Academic Experience Survey](#), two-in-five UBC undergraduate and graduate students have been concerned about their financial ability to feed themselves during the previous year. Thus it is recognized that the compulsory costs of digital learning materials can be a financial burden for students even at the capped \$65 amount. UBC is, and should be, supporting and developing a wide range of learning materials and technologies and should not be out-sourcing a **significant** component of

assessment into third-party paid systems. The assessment percentage limit is largely in line with (though a little higher than) than what some Ontario institutions have mandated as the max.

**Can courses go beyond the limits if instructors are able to directly negotiate free or discounted access for specific students facing financial hardship?**

No. The provision of limited no- or low-cost alternatives, such when students can speak directly to instructors for discounted access codes, or when such materials can be accessed on limited terminals in specific locations such as the Library, is detrimental to the equity of learning experiences and may place unfair burdens on specific students. If students are offered and able to choose (without disclosing financial hardships) between alternative assessment schemes as options with non-fee based materials, then the use of those materials become non-compulsory and would not count towards a cap.

**Does the \$65 threshold create an endorsement for charging students for things that should be part of tuition?**

In principle, the payment of tuition supports the cost of assessment. However, there may be pedagogical (e.g. the assessments are better than could be offered in Canvas) or logistical reasons (e.g. the class is 400 people and the assessment tool needs to scale) for an instructor to choose third-party vendor materials for a portion of the assessment. UBC should enhance both financial support for students as well as institutional support for open or UBC-hosted tools and materials so that students never have to choose between taking a mandatory grade reduction and paying for access a third-party system.

**How can students be provided timely information about all compulsory fees related to a course?**

Currently, in order to provide students timely information about costs related to learning materials, instructors must place their materials order, or inform the bookstore if they are using OER, several weeks before the start of term. The Bookstore then pushes that information to the Student Service Centre (SSC), which allows students to see costs at time of enrolment. UBC should invest in the development of processes, systems, and services that make compulsory fees transparent before enrolment. For example, providing historical fee data related to a course may provide additional information to students.

**Do iClickers count towards the \$65 limit?**

No, this limit only applies to compulsory, non-tuition-related ancillary fees for digital materials that students are *not* able to own and retain. Students have a range of options when purchasing or accessing iClicker devices, including purchasing used iClickers hardware-based devices, sharing the device, or using an app-based version. However, alternative digital-only classroom response systems, such as TopHat, may fall under the cap if students are required to purchase access to a digital service (i.e. they can't share access or access a used version) and if the service is used for assessed activities.



3 May 2019

To: Vancouver Senate  
From: Senate Teaching and Learning Committee  
Re: Annual Report 2018-2019

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The Senate Teaching and Learning Committee is pleased to provide Senate with the following updates as to the Committee's recent activities:

*1) Policy V-130: Content and Distribution of Course Syllabi*

In Fall 2018, the Committee worked with the Academic Policy Committee to develop the policy on Content and Distribution of Course Syllabi. This policy serves to set out clear expectations of instructors with regard to the provision of a course syllabi, and the minimum basic information that must be included therein. The policy, a joint submission to Senate, was approved in January 2019.

*2) Undergraduate Research Working Group*

The working group was established by the Committee in January 2018 to implement an action framework to enhance access to undergraduate research opportunities at UBC. The goal of the working group was to explore and pursue ways to improve the UBC student academic experience via increased access to undergraduate research opportunities, allowing students to enhance academic learning and strengthen post-graduation success.

The working group held three meetings and undertook extensive consultation, including the Associate Deans, Academic and Research in each Faculty. The working group's activities resulted in a \$1m commitment of strategic funds over two years for the Program for Undergraduate Research Experience (PURE), administered by the Vice-President Research and Innovation portfolio, and open to students, faculty and staff at both the Okanagan and Vancouver campuses. A call for innovative pilot proposals was made in early 2019, with funding recipients announced in April 2019.

*3) UBC Principles for Digital Learning Materials Used for Assessment*

The cost of digital learning materials was originally presented as a 'Topic of Broad Academic Interest' at the May 2018 meeting of Senate, and was positively received. The Principles were then developed and brought back for Committee discussion and feedback at three meetings (November 2018, March 2019 and April 2019). The Principles are herein presented for endorsement by the Senate, under separate circulation.

#### 4) *Principles of Effective Graduate Supervision*

The Principles of Excellent Graduate Supervision were brought forward as a Topic of Broad Academic Interest at the November 2018 meeting of the Senate, following which the Committee continued to support the work of the Faculty of Graduate and Postdoctoral Studies to finalize the development of seven flexible, interrelated and research-informed principles that characterize high quality graduate student supervision. The Principles were endorsed by Senate in January 2019.

#### 5) *Quality Assurance Process Audit*

During 2018/19, the UBC Vancouver campus underwent a Quality Assurance Process Audit (QAPA). The process was in three phases: the preparation of a submission to the Ministry; (2) a site visit by a panel of external reviewers; and, (3) the preparation of an institutional response to the report of the external reviewers.

The Committee received regular updates throughout QAPA process. In February 2019, consultation on the external reviewer's report and UBC's response was held with the Academic Policy, Curriculum and Teaching & Learning Committees. Senate then approved the Institutional Response to the QAPA site visit report and its submission to the Ministry of Advanced Education, Skills and Training in March 2019.

#### 6) *Student Evaluation of Teaching Working Group*

The Committee struck a working group in November 2018 to undertake a broad review of issues related to the Student Evaluation of Teaching. Subsequent discussions led to constituting this working group with cross-campus representation, with reporting into both Senates via Teaching and Learning (Vancouver Senate) and Learning and Research (Okanagan Senate) committees. The mandate of the working group includes:

1. Interrogate anonymized UBC data gathered through student evaluation of teaching, to determine if there is evidence of potential biases.
2. Review and assess the recent literature on the effectiveness of student evaluation of teaching, with particular reference to potential sources of bias in evaluations.
3. Review the University questions (UMI) used in student evaluation of teaching 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 student evaluation of teaching as a component of teaching evaluation.
5. Consider the implications any proposed changes may have on other components of teaching evaluation.



A formal review of the Vancouver Senate policy on Student Evaluation of Teaching is outside of scope of the remit of the working group. The working group is co-chaired by Dr Dan Pratt (Professor Emeritus in the Faculty of Education and CHES, Vancouver) and Dr Peter Arthur (Professor of Teaching, Okanagan School of Education).

The working group first met in March, had a subsequent meeting in April and will meet once more in June before the summer break. Activities that align with each of the mandate items of the working group are underway. This includes:

- A compilation of questions (University -level, Faculty level) and processes used across each of the two campuses, highlighting variations in practice and process.
- An environmental scan of recent arbitration decisions and selected university policy and process changes that this has precipitated.
- A literature review of recent studies on the efficacy and potential biases in student evaluation data (in progress)
- An examination of the data analysis and reporting affordances of the new software used for student evaluation of teaching (Blue by Explorance) which replaced the Courseval software in 2018/19 academic year.
- Initial exploration of an engagement approach to gather input and feedback from faculty and students (in progress)

The working group will continue to provide regular updates to the Committee, with a final report anticipated sometime during the 2019/20 academic year.

Respectfully submitted,

Dr. André Ivanov, Chair  
Senate Teaching and Learning Committee



3 May 2019

To: Vancouver Senate

From: Tributes Committee

Re: Candidates for Emeritus Status (approval)

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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 Dean Emeritus, Professor Emeritus, Associate Professor Emeritus, Assistant Professor Emeritus, Senior Instructor Emeritus, and Professor of Teaching Emeritus be added to the Roll of Convocation.*

Respectfully submitted,

Dr. Sally Thorne  
Chair, Tributes Committee

Vancouver Senate  
Faculty Members Eligible For Emeritus Status  
2019 May Senate Meeting

Last Name	First Name	Rank	Faculty	Emeritus Title
Frankish	Charles James	Professor	Medicine	Professor Emeritus of Population and Public Health
McDougall	Elspeth M.	Professor	Medicine	Professor Emeritus of Urologic Sciences
Nasmith	Louise	Professor	Medicine	Principal Emeritus of the College of Health Disciplines
Nelson	Colleen	Associate Professor	Medicine	Associate Professor Emeritus of Urologic Sciences
Numata	Masayuki	Assistant Professor	Medicine	Assistant Professor Emeritus of Biochemistry and Molecular Biology
McKenzie	Donald C.	Professor	Education and Medicine	Professor Emeritus of Kinesiology and Family Practice
Barnett	Michael	Clinical Professor	Medicine	Clinical Professor Emeritus of Hematology
Blachut	Piotr	Clinical Professor	Medicine	Clinical Professor Emeritus of Orthopaedics
Hogge	Donna	Clinical Professor	Medicine	Clinical Professor Emeritus of Hematology
Ehlen	Thomas	Clinical Professor	Medicine	Clinical Professor Emeritus of Obstetrics and Gynaecology
Chan-Yan	Clifford	Clinical Professor	Medicine	Clinical Professor Emeritus of Nephrology
Marquette	Gerald	Clinical Professor	Medicine	Clinical Professor Emeritus of Obstetrics and Gynaecology
Shaw	Dorothy	Clinical Professor	Medicine	Clinical Professor Emeritus of Obstetrics and Gynaecology
Taylor	Robert	Clinical Professor	Medicine	Clinical Professor Emeritus of Surgery
Unger	Waldemar	Clinical Associate Professor	Medicine	Clinical Associate Professor Emeritus of Obstetrics and Gynaecology
Simpson	Lynn	Clinical Professor	Medicine	Clinical Professor Emeritus of Obstetrics and Gynaecology
Grierson	David	Professor	Pharmaceutical Sciences	Professor Emeritus of Pharmaceutical Sciences
Burnett	Cathy	Associate Professor	Arts	Associate Professor Emeritus of Theater and Film
Gorsuch	Anne E.	Professor	Arts	Professor Emeritus of History
Lehman	Darrin R.	Professor	Arts	Professor Emeritus of Psychology

Vancouver Senate  
Faculty Members Eligible For Emeritus Status  
2019 May Senate Meeting

Last Name	First Name	Rank	Faculty	Emeritus Title
Matthews	David Ralph	Professor	Arts	Professor Emeritus of Sociology
Pokotylo	David L.	Associate Professor	Arts	Associate Professor Emeritus of Anthropology
Salumets	Thomas	Associate Professor	Arts	Associate Professor of Central, Eastern, and Northern European Studies
Sarkonak	Ralph	Professor	Arts	Professor Emeritus of French, Hispanic and Italian Studies
Sindelar	Arlene Marie	Senior Instructor	Arts	Senior Instructor Emeritus of History
Walker	Lawrence John	Professor	Arts	Professor Emeritus of Psychology
Roberts	Clive R.	Associate Professor	Dentistry	Associate Professor Emeritus of Oral, Biological, and Medical Sciences
Ercikan	Kadriye	Professor	Education	Professor Emeritus of Educational and Counselling Psychology and Special Education
Haney	Colleen	Senior Instructor	Education	Senior Instructor Emeritus of Educational and Counselling Psychology and Special Education
Wilson	Gail E.	Senior Instructor	Education	Senior Instructor Emeritus of Kinesiology
Larson	Bruce Conrad	Professor	Forestry	Professor Emeritus of Forest Resources Management
Upadhyaya	Mahesh K.	Professor	Land and Food Systems	Professor Emeritus of Applied Biology
Brant	Rollin Frederick	Professor	Sciences	Professor Emeritus of Statistics
Harrison	Paul Garth	Associate Professor	Science	Associate Professor Emeritus of Botany
Mackworth	Alan K.	Professor	Science	Professor Emeritus of Computer Science
Nomme	Kathy Margaret	Professor of Teaching	Science	Professor of Teaching Emeritus of Zoology
Petkau	A. John	Professor	Science	Professor Emeritus of Statistics
Smit	John Kenneth	Professor	Science	Professor Emeritus of Microbiology and Immunology
Weiler	Joseph	Professor	Peter A. Allard School of Law	Professor Emeritus of Law
Muzyka	Daniel	Professor	Commerce and Business Administration	Dean Emeritus of Commerce and Business Administration
Bailie	Darrell	Administrative Librarian	Library	Administrative Librarian Emeritus
Hives	Christopher	Administrative Librarian	Library	Administrative Librarian Emeritus



# STRATEGIC PLAN UPDATE – UBC SENATE

May 15<sup>th</sup>, 2019





## **FY 18/19 STRATEGIC PLAN IMPLEMENTATION**

### **Key priorities for FY 18/19 were:**

Great people  
Thriving communities  
Inclusive excellence  
Collaborative clusters

Student research  
Education renewal  
Indigenous engagement





## KEY HIGHLIGHTS SINCE THE PLAN LAUNCH

Great people

Thriving communities

Inclusive excellence

Collaborative clusters

Student research

Education renewal

Indigenous engagement

### **Great people:**

- Further contribution to Blue and Gold Campaign
- Refreshed the Focus on People Framework
- Launched workforce planning pilot projects
- Created UBC Science early career invited lecture awards

### **Thriving communities:**

- Established the Rapid Transit Project Office
- Developed Wellbeing Framework
- Planning underway to refresh Graduate Student Centre

### **Inclusive excellence:**

- Developed Inclusion Action Plan



## KEY HIGHLIGHTS SINCE THE PLAN LAUNCH

Great people

Thriving communities

Inclusive excellence

Collaborative clusters

Student research

Education renewal

Indigenous engagement

### **Collaborative clusters:**

- Launched Grants for Catalyzing Research Clusters competition
- Eminence program
- Public Humanities Hub

### **Student research:**

- Program for Undergraduate Research Experience
- Aboriginal research mentorship program



## KEY HIGHLIGHTS SINCE THE PLAN LAUNCH

Great people

Thriving communities

Inclusive excellence

Collaborative clusters

Student research

Education renewal

Indigenous engagement

### Indigenous Engagement:

- The Dialogue Centre building opened in April 2018
- Developed new Indigenous Strategic Plan – pending June Board approval
- UBC's Response to the Truth and Reconciliation Commission's Calls to Action (UBCO completed, UBCV underway)
- Exploring feasibility of Indigenous Land Management Centre in UBCO – naming is still pending consultation
- Developing a dual credit transfer course for Indigenous teachers



## KEY HIGHLIGHTS SINCE THE PLAN LAUNCH

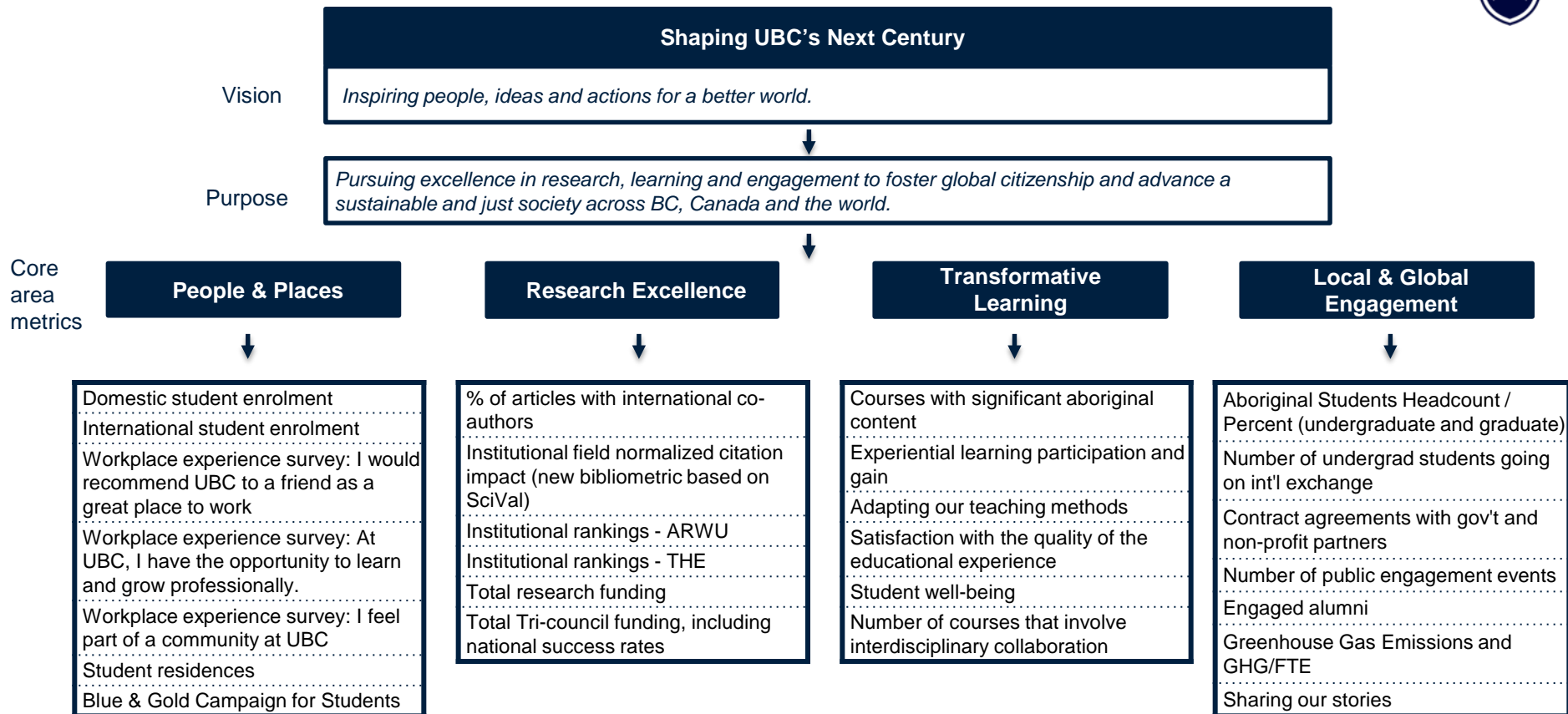
Great people  
Thriving communities  
Inclusive excellence  
Collaborative clusters  
Student research  
Education renewal  
Indigenous engagement  
Other strategies

### Initiatives in progress under other strategies:

- Increased investment in Digital Research Infrastructure and Advanced Research Computing
- Formed Creative Destruction Lab – West
- Created Innovation Hubs in downtown Vancouver and Kelowna
- Development of Research Integrity Training Framework
- UPER – Undergraduate Program Evaluation and Renewal
- Kicked off OLAF – Online Learning Advancement Fund
- Expansion of Collegia
- Additional support for Climate Hub
- Launched UBC Connects
- Established Global Innovations Grant
- Increased support for project to improve practice of community-based research in the downtown eastside



# STRATEGIC PLAN METRICS





## FORWARD-LOOKING – FY 19/20 AND 20/21

There are 6 key priorities that have emerged:

- Indigenous engagement
- Great people
- Thriving communities
- Research support
- Education renewal
- Interdisciplinary education

3 large open calls are planned with topics under:

- **Great people** – to support the implementation of Focus on People Framework
- **Indigenous engagement** – to support the implementation of the Indigenous Strategic Plan
- **Interdisciplinary education** – introducing greater interdisciplinary collaboration



## WEBSITE

- Modified current Strategic Plan website to highlight latest news and updates
- Relaunching our Strategic Plan website in the Fall to better reflect our implementation progress
- New stories series launching in the fall to provide real-time updates on how we are advancing the plan

### Shaping UBC's Next Century

UBC's strategic plan represents a roadmap. It sets out our collective vision, purpose, goals and strategies for the years ahead. It guides our decisions and actions - inspiring the very best in our students, faculty, staff, alumni and partners. We hope you will join us on this journey.

- [Download the full UBC Strategic Plan \(PDF 5.9 MB\)](#)
- [Print the vision and goals poster \(PDF 760 KB\)](#)

#### Latest News and Updates

- [Call for proposals for the Online Learning Advancement Fund \(OLAF\)](#)
- [PURE funding recipients announced](#)
- [Help shape UBC's priorities for global engagement](#)
- [Update on Undergraduate Program Evaluation and Renewal Projects](#)
- [Call for proposals: Program for Undergraduate Research Experience applications open January 7](#)

[View More](#) ➔



## MEMORANDUM

**DATE:** 15 May 2019  
**TO:** Senate  
**FROM:** Registrar  
**SUBJECT:** Senate Appeal Processes

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The March meeting of Senate concluded with a discussion of the Senate's appeal committees in which concerns were raised on behalf of student members. The Senate Secretariat is always grateful for comments on Senate processes from members of Senate. Feedback from student members is particularly welcome given their unique perspective.

The purpose of this memorandum is to acknowledge the concerns and recommendations raised in March. It provides additional background about Senate appeal processes and indicates possible avenues for addressing the concerns raised. It is not a complete or final response, but rather a first step in applying this feedback towards ongoing efforts to continuously improve Senate processes. It has been shared with the members of both appeal committees, but has been prepared by the Secretariat and does not necessarily represent the views of the committee members.

### **Senate Appeal Processes**

The *University Act* designates Senate as the final body of appeal in matters of academic standing and student discipline. To fulfill this function, Senate has established two appeal committees – the Senate Committee on Appeals of Academic Standing and the Senate Committee on Student Appeals on Academic Discipline. The membership of the appeal committees includes student, convocation and faculty senators. Each Committee is guided by terms of reference and by rules governing the process by which appeals come before the Committees and how they are heard and decided. Both Committees issue reasons in writing in every appeal heard, and the decisions of the Committees are subject to judicial review by the Courts.

### **Student Membership on Committees**

The committees recognize the important contribution made by their student members. The practice of the Secretariat has long been to ensure student representation at every appeal hearing. While exceptions to this rule have been made due to scheduling constraints, they have been very rare.

The Secretariat will continue to ensure student involvement in appeals. However, it is important to recognize the impact that additional constraints on panel composition would have on members and on the timeliness of hearings. Mandating greater student involvement by requiring multiple students at each hearing, or that students from specific constituencies be involved in certain appeals may increase the demands placed on student members. It may also make it more difficult to schedule hearings, leading to delays for student appellants who may be pursuing time-sensitive appeals.



## Diversity

Diversity in any decision-making body, including adjudicative bodies like the appeal committees is important. Both Committees hear appeals in panels of five or more, and the composition of each panel is considered when scheduling hearings. However, the ability of the Secretariat to ensure diverse hearing panels is constrained by the composition of the Committee and, in turn, that of Senate. Ultimately, the composition of the Committee is determined by the Senate Nominating Committee (and Senate), which must balance the importance of diversity on these Committees with the importance of diversity on others, alongside other considerations including member preferences.

## Education and On-Boarding

Regular training is essential to the effective operation of the committees. Progress has been made in the past year in the training provided to members. For the first time, we have been able to offer training tailored to the work of the Committees in place of generalized administrative justice training. Additionally, orientation sessions are offered to all new members once appointed.

Among the challenges faced in providing effective training in the past has been a lack of control over the timing and nature of training, and a lack of certainty over available resources. To address the concerns raised, the Secretariat proposes to prepare a formal education and training plan. This training plan could include both administrative justice training and more focused training on issues relevant to the committees. The Secretariat will continue to offer orientations to new members.

The Secretariat will also ensure that new student senators understand the expectations associated with serving on appeal committees prior to students requesting committee assignments.

## Scheduling

Scheduling is one of the most challenging elements of managing Senate appeals. Appellants are often eager to move forward with appeals as quickly as possible, while it can be difficult for respondents, committee members and witnesses to fit lengthy hearings into already busy schedules.

In the past year, the Secretariat has experimented with replacing the previous *ad hoc* model of scheduling with a fixed schedule of hearing dates set at the beginning of each term. The feedback received on this model has been mixed. Efforts to refine the scheduling system will continue.

Appeal hearings are typically set for three hours, though each case is assessed to determine whether more time is required. In most cases, three hours is ample time. However, the need to ensure that the parties have a full opportunity to present their case has resulted in rare instances in which hearings have run over time. In such cases, the Chair may extend the hearing with the consent of the members and the parties, or the hearing may be re-scheduled for continuation.

## Process

The Secretariat recognizes the difficulty some students have in navigating appeal processes. We provide guidance to the extent possible, and always refer students to the AMS Advocacy Office and the Ombudsperson. However, given the relationship between the Secretariat and the Committees, it would be inappropriate to provide strategic advice to students pursuing appeals. Despite the guidance offered by the Senate Secretariat and the referrals to external support services, many students proceed through the appeal process without assistance.

Given the need to maintain the independence of the Committee and the Secretariat, additional support for students involved in appeal processes is best provided by other units within the University or student government. However, there may be limited steps the Secretariat can take to provide greater support for students, including the creation of templates for required documents to provide guidance regarding expected format and content and the production of a companion document to the appeal rules that would translate the rules into plain language.

The discussion at the March Senate meeting also included recommendations for the University's administrative justice processes more broadly. If misinterpreted as being directly applicable to Senate appeal processes, they may have resulted in confusion regarding the committees and their practices. The following is intended to clarify the nature and scope of Senate appeals. These recommendations will be forwarded to other appropriate units within the University.

- a. The Senate Committee on Student Appeals on Academic Discipline hears appeals of disciplinary decisions and reviews individual discipline decisions. The Committee does not impose discipline and would not be responsible for establishing generally applicable categories of misconduct or ranges of penalties outside of individual cases.
- b. The Senate Committee on Appeals of Academic Standing hears appeals of matters of academic standing. The Committee's jurisdiction is limited to a review of procedures employed by the Faculties in assigning and reviewing academic standing. The Committee has no jurisdiction over questions of academic judgment.
- c. The final stage before a decision in any appeal is the hearing, at which appellants are present and entitled to make submissions (including a right of final reply – the 'last word' in the process). There is no stage in the appeal process in which the Committee receives information or recommendations from anyone other than the parties or the Secretariat.
- d. Students involved in Senate appeals are always provided with copies of all materials considered by the Committees in advance of the appeal hearing. The Committees do not consider materials not previously provided to the student.