Docket Page 1 of 180 Office of the Senate Brock Hall | 2016-1874 East Mall Vancouver, BC Canada V6T 1Z1

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

Okanagan Senate

THE EIGHTH REGULAR MEETING OF THE OKANAGAN SENATE FOR THE 2018/2019 ACADEMIC YEAR

THURSDAY 25 APRIL 2019

3:30 P.M. | ASC 130

1. Senate Membership

New Members:

Mr. Abdul Alnar, Representative of the Convocation, until 31 August 2020 and thereafter until replaced, to fill a vacancy.

Mr. Venedict Tamondong, Representative of the Students of the Faculty of Applied Science (Continuing), until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Mr Shao Yuan Chong, Representative of the Students of the Faculty of Arts and Sciences (Continuing), until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Ms Simran Sandhu, Representative of the Students of the Faculty of Health and Social Development, until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Ms Deborah Efretuei, Representative of the Students of the Faculty of Management, until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Mr Hogun Kang, Graduate Student Representative, until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Ms Laura Mudde Graduate Student Representative, until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Ms. Kelsey Desorches, Representative of the Students At-large (Continuing), until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Ms Geethma Jayathilake, Representative of the Students At-large, until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Mr Jesse Lafontaine, Representative of the Students At-large, until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Mr. Jassim Naqvi, Representative of the Students At-large (Continuing), until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Ms Abbey Shields, Representative of the Students At-large, until 31 March 2020 and thereafter until replaced, to fill a vacancy.

Ms Gurjot Sidhu, Representative of the Students At-large, until 31 March 2020 and thereafter until replaced, to fill a vacancy.

NB: Processes are underway to fill the student vacancy for the Faculty of Education.

Declaration of Vacancy

Dr Peter Wylie, Representative of the Joint Faculties (Rule 12: Absent without leave for three consecutive regular meetings of Senate)

Nominating Committee

This is 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. Nominations are due by 4 pm on Friday 3 May 2019 to christopher.eaton@ubc.ca. If more than two students are nominated, an election will be held at the May meeting of Senate in accordance with Rule 24 (e) of the Rules and Procedures of Senate.

- 2. Minutes of the Meeting of 28 March 2019 Dr Santa Ono (approval) (docket pages 4-14)
- 3. Business Arising from the Minutes Dr Santa Ono (information)
- 4. Learning & Research Committee Dr Deborah Roberts

Memorial Minute for Dr W. Wesley Pue (approval) (docket pages 15-16)

- 5. Remarks from the Chair and Related Questions Dr Santa Ono (information)
- 6. Remarks from the Deputy Vice-Chancellor and Related Questions Prof. Deborah **Buszard** (information)
- 7. Council of Senates Budget Committee Dr Ramon Lawrence

2019 Budget Presentation and 2018-2019 Financial Statements (information) (docket pages 17--80)

- 8. Joint Report of the Admissions & Awards and Curriculum Committees Ms **Tamara Ebl and Dr Peter Arthur**
 - a. New Program: Doctor of Philosophy in Computer Science (approval) (docket pages 81-106)
 - b. New Program: Doctor of Philosophy in Nursing (approval) (docket pages 81, 107-130)
- 9. Admission & Awards Committee Ms Tamara Ebl
 - a. New Policy: O-200: Student Awards (approval) (docket pages 131-142)
 - b. New Awards (approval) (docket pages 143-144)
- 10. Curriculum Committee Dr Peter Arthur

Curriculum Proposal from the faculties of Applied Science. Arts & Sciences, Creative & Critical Studies, Education, and Management (approval) (docket pages 145-178)

11. Nominating Committee - Dr Jannik Eikenaar

- a. Appointment to the Council of Senates (approval) (docket page 179)
- b. Appointment of a President's Advisory Committee for the Selection of a Deputy Vice-Chancellor (information) (docket page 179)
- c. Committee Vacancies (information) (docket page 180)

12. Other Business

The Rules and Procedures of the Okanagan Senate states that meetings will adjourn no later than 5:30 p.m. Regrets: Telephone 604.822.5239 or e-mail: facsec@mail.ubc.ca

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

OKANAGAN SENATE

MINUTES OF 28 MARCH 2019 DRAFT

Attendance

Present: D. Buszard (Vice-Chair), K. Ross (Secretary), S. Alam, U. Anyaoha, P. Arthur, P. Barker, H. Berringer, G. Binsted, M. Campbell, D. Carter, Y. Chen, S. Chong, J. Cioe, C. Comben, J. Corbett, I. Cull, T. Ebl, J. Eikenaar, J. Gustar, M. Harper, M. Hoorfar, J. Hossain, J. Jakobi, R. Lalonde, R. Lawrence, S. Lawrence, Y. Lucet, B. MacBean, B. Marcolin, S. McNeil, A. Mukherjee-Reed, J. Naqvi, S. O'Leary, A. Pipke, M. Reekie, D. Roberts, B. Rutherford, R. Sadiq, R. Sugden, V. Tamandong, B. Traister, J. Traplin, G. Wetterstrand.

Regrets: S. Ono (Chair), R. Campbell, B. Dawson, B. Frank, L. Fraser, L. Gordon, J. Johnson, M. Legault, J. Loeppky (LOA), J. Olson, F. Pena, R. Snider, D. Tannant, P. Wylie.

Clerk: C. Eaton

Call to Order

Vice-Chair Deborah Buszard called the meeting to order at 3:36 pm.

By general consent, the budget presentation was tabled to the next meeting, and an item was added under other business: an information item from the Provost regarding the establishment of the Green Construction Research and Training Centre.

Minutes of 28 February 2019

Jan Cioe Peter Arthur	}	That the Minutes of the Meeting of 31 January 2019 be adopted as corrected:
		Capitalisation of President and University as appropriate on page 2.
		Addition of the word "not" before "contemplate in the first paragraph of page 3.
		Addition of "Cioe" after "Senator" on page 8.
		Several missing hyphens on pp 5-9.



Remarks from the Deputy Vice-Chancellor

Dr Buszard noted that the Council of Senates met earlier in the day; this was the first meeting of the Council since 2009. The Council has now resolved to meet at least every triennium. Since the last meeting, UBC has had 4 presidents and all the vice-presidents have changed over.

Senator Cioe said that the purpose of the Council was to resolve conflicts between the campuses; one reason why it hasn't met is that each senate has respected each other's jurisdictions.

Senator Cioe asked what the status was of the Dean of Graduate Studies search.

The Provost said the committee has now been formed and was starting its work.

Senator Cioe said the external review of Arts and Science was completed as of January, but noted that the faculty was being asked to consider splitting and having that report available would help inform that decision.

Certificates

The Vice-Chair presented certificates of thanks to those students who served on Senate over the past year.

Admission and Awards Committee

The Chair of the Senate Admissions & Awards Committee, Dr Gregory Wetterstrand, presented

}

NEW AWARDS

See Appendix A: Awards Report

Greg Wetterstrand Catherine Comben That Senate accept the new awards as listed and forward them to the Board of Governors for approval; and that a letter of thanks be sent to the donors

Approved



CHANGES TO THE ENGLISH LANGUAGE PROFICIENCY ADMISSIONS REQUIREMENTS FOR GRADUATE PROGRAMS

Greg Wetterstrand	}	That Senate approve the revised English
Jan Cioe		Language Proficiency admissions requirements
		for Master's and Doctoral Degrees.

By general consent, the proposal was amended to add "A minimum score of" prior to "90".

Senator McNeil pointed out that those programs with their own averages for the former paper exam would need to propose corresponding changes.

Approved as Amended

Curriculum Committee

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

MARCH CURRICULUM PROPOSALS

See Appendix B: Curriculum Report

Peter Arthur

Tamara Ebl

To Governors for approval the new courses
brought forward from the Faculty of Applied
Science, the new courses brought forward from
the Faculty of Creative & Critical Studies, the
revised Post-Baccalaureate Education Program
brought forward from the Faculty of Education
and the new course brought forward from the

Senator Cioe said that one of the English courses was targeted towards international students in its rationale but in the course description it said it would be of use to both domestic and international.

Senator Traister said this course replaces ENGL009; the current enrolment pattern for that course includes domestic and international students. There is not attempt to limit this course to students admitted as domestic or international. We will offer sufficient sections for expected enrolment needs.

Faculty of Health and Social Development.



In follow up, Senator Cioe asked if the program requirements of Bachelor of Managements students were considered.

Bryce said no, because those students generally took ENGL112.

Jan said that this would require adjustments in other places.

Bryce said a few sections of ENGL009 would be offered during a transition year.

Senator S. Lawrence said that ENGL112 would continue to offered.

Senator Marcolin asked about ENGL115 and the use of the word "prototyping" without a qualifier.

Dean Traister said he could not come up with a modifier on the floor that may help address the senator's concern.

Senator Cioe said that faculties could add descriptor notes to the registration system.

Approved

Report of the Chief Librarian

Ms Heather Berringer, Chief Librarian of the Okanagan campus, presented.

Ms Berringer noted the following highlights for the Senate:

- This year, the Library answered almost 28,000 individual questions at our two primary service points the campus Library's single service desk and the Innovation Library, located in downtown Kelowna at Okanagan Regional Library's Kelowna branch on Ellis Street. In addition to these walk-in inquiries, 2,050 in-depth research consultations were performed by our professional librarians.
- Our Writing & Research Centre had student satisfaction rates of 96% based on their postappointment surveys (and, as always, our Centre for Scholarly Communication is at 100% utilization – the appointments are snatched up as quickly as we can increase their availability).

Ms Berringer advised that collections continued to transition to online sources:

• Total system volumes are approximately 7.8 million. About 5.5 million are print volumes or AV items (with just about 200,000 of them housed on our campus) while over 2.3 million are ebooks.



• System wide, print circulation continues on a downward trend, but this is not a surprise given the shift to digital resources, and is in line with the trends seen in other academic research libraries. Many of our electronic collections are subscribed to in large packages that are colloquially referred to as "big deals", provided by large commercial publishers. Here, you see the pricing for the four top "big deal" packages we subscribe to, and a glance at how their subscription fees are increasing over time.

Ms Berringer advised that the nature of these large packages makes it difficult for libraries to reduce their spending, as the per-title prices, when subscribed to outside of a "big deal", are such that a library can usually only obtain a small number of titles for a similar price as the entire package She suggested that it was important to know that at this point there was a movement to start taking a stand against what is considered to be outrageous pricing strategies. Many of you may have heard about the University of California system's stand against Elsevier. In Europe, countries like Germany and Norway have also undertaken coordinated efforts to curb increases and fight the practice of having journals charge scholars open access fees to publish while also charging their institutions for subscriptions.

In the area of teaching and learning, Ms Berringer advised:

- We explored integrating library-designed instructional tools, modules, and assessments
 into courses through Canvas. In 2018, we began work on modules that would integrate
 into Chemistry classrooms, and address questions related to citation. We were also
 successful in obtaining an ALT grant that will support creation of content in a number of
 additional disciplines.
- We continued with two ongoing projects (Masters of Social Work + First Year English) to embed library instruction in a scaffolded way throughout a term to find students at their point of need. For 2019, we are looking at how to expand the results of this research to other disciplines.
- We also launched successful peer observation and professional development programming to help our librarians develop their teaching practice.

Finally, Ms Berringer noted the recently-opened "Commons" building, with its 400-seat classroom being the largest on campus, and specifically developed to support innovative pedagogy, including through its unique portable classroom whiteboards. Classes have been scheduled in this space since January, and several major events have already been scheduled and delivered. She also noted the Gallaria space and the D. Ross Fitzpartrick Great Hall as two open collaborative spaces to encourage interaction and active learning.

Senator S. Lawrence asked if university presses were also increasing their prices with the commercial presses.

Ms Berringer replied that they were increased but not nearly as much



Senator Cioe asked what the limitation was for capacity for the Centre for Scholarly Communications.

Ms Berringer said that barrier was staffing. We did add more staff this year but all those new appointments were booked. We've also started peer writing groups, but graduate students really want one-on-one help. Faculty members are also using the service.

Senator Corbett said that Ticouncil requirements for funding in grant applications and opensource publications and if this will affect what universities pay.

Senator Jakobi asked about international and indigenous grad students, often first generation, having a greater need for services as their number grow.

Ms Berringer said we do have research and programming for international students, but our specific work for indigenous students is drop-ins for collegium. Our graduate student work said they like our services but would like more information on other services available for them.

Senator McNeil asked if access to content in the future was an issue with electronic access.

Ms Berringer replied that there were consortium initiatives for preserving content. In many cases we are only paying for access and not ownership. We also keep last copies in preservation storage, and are working with COPPL for shared copies and digital preservation.

Senator S. Lawrence said the journal costs weren't the library's problem. He noted that at one time, journals were published by universities at cost. Maybe we should increase the size of our press and trade with others rather than keeping with the commercial providers.

Senator Ebl noted that some of our own material was also kept digitally, such as the Okanagan history. She asked if that material was appropriately backed up and how it was funded.

Ms Berringer said we had duplicate copies. Philanthropy funds that particular project, and the costs were very low.

Senator Tamandong said Make Your Space was being increasingly relied upon by applied science, and students were finding restricted hours or access was a challenge due to its heavy use by APSC.

Ms Berringer said that the make your space was not intended to replace engineering labs. Our goal is to make it more interdisciplinary and collaborative. It will probably mean increased use and will no longer work for faculties who intend to use it heavily.



Inclusion Action Plan (IAP)

The Deputy-Vice Chancellor asked Senate to welcome the Associate Vice-President Equity and Inclusion, Dr Sara-Jane Finlay, to present.

Dr Finlay noted that she reported to the two Academic Vice-Presidents, the Vice-President Human Resources, and the Vice-President students. Under their leadership, her office is working to operationalize the Inclusion priority in UBC's Strategic Plan. Over the past 10-12 years, a number of reports have laid the foundation for the IAP, which will serve as a capstone. The purpose of the IAP is to operationalize what we mean by inclusion at UBC, and provide goals and actions for both the institution and its units.

The Associate Vice-President noted that the goals set were at a high level and aspirational. It will not be done by 2024. She suggested that this is why measures to show movement are important.

Dr Finlay noted that the definition for inclusion in the IAP was as follows

"At UBC, inclusion is a commitment to creating a welcoming community where those who are historically, persistently, and systemically marginalized are treated equitably, feel respected, and belong. Inclusion is built by individual and institutional responsibility through continuous engagement with diversity to inspire people, ideas, and actions for a better world."

Senator Cioe said that using AND instead of or in the marginalized line was limiting.

Dr Finlay went on to specify the five goal areas for the IAP:

- Capacity Building: UBC will enhance institutional and individual capacities and skills to succeed in and advance inclusive environments.
- Diverse People and Success: UBC will actively recruit, support, retain, and advance students, faculty, staff, and leaders from systemically marginalized populations.
- Systems Change: UBC will be intentional and proactive in changing systems, structures, policies, practices, and processes to advance equity, diversity, and inclusion. Learning, Research & Engagement: UBC will foster environments of learning, research, and engagement that value building and exchanging multiple and intersectional ways of knowing.
- Accountability: UBC will hold itself accountable to its commitment to inclusion through clear and timely processes, thorough evaluation, and transparent reporting to the UBC communities on its progress on this action plan.

Senator Marcolin asked if the tools being prepared for managers could also work for faculty members.

Dr Finlay said they are working on inclusive teaching tools.



Senator Roberts asked why we don't say we want to include everyone rather than delineating specific groups who have tended to be excluded.

Dr Finlay said the goal was to focus our work on those most systemically disadvantaged; as an example the cited UBC's work on preferred name usage.

Senator McNeil noted that we asked applicants for their name and their gender as the first two questions on our application. Why can't we just change that?

The Registrar, Dr Ross, said it was a lot of work across the province. The registrars of BC post-secondary institution are continuing to work there.

Other business

GREEN CONSTRUCTION RESEARCH AND TRAINING CENTRE

The Provost, Dr Ananya Mukherjee-Reed, announced the established of the Green Construction Research and Training Centre in the Faculty of Applied Science pursuant to Senate Policy O-5.

Senator Cioe asked Senator Sadiq if Applied Science had worked with those faculty members working on sustainability in the Faculty of Arts and Sciences

Senator Sadiq said yes they were involved.

Adjournment

Seeing no other business, the meeting was adjourned at 5:04 p.m.



Appendix A: Awards Report

NEW AWARDS:

Master of Data Science Domestic Scholarship

Master of Data Science Domestic Scholarship is a \$5,000 entrance scholarship offered annually to a domestic student in the Master of Data Science program at UBC Okanagan. The scholarship recognizes a student who has demonstrated academic and leadership achievements in their undergraduate or graduate program, field or industry. The award is made on the recommendation of the Master of Data Science Admissions Committee. (First award available for the 2019/20 Winter Session)

Master of Data Science International Scholarship

Master of Data Science International Scholarship is a \$5,000 entrance scholarship offered annually to an international student in the Master of Data Science program at UBC Okanagan. The scholarship recognizes a student who has demonstrated academic and leadership achievements in their undergraduate or graduate program, field or industry. The award is made on the recommendation of the Master of Data Science Admissions Committee. (First award available for the 2019/20 Winter Session)

Lieutenant Governor's Medal for Inclusion, Democracy and Reconciliation

One medal is offered annually by the Lieutenant-Governor of British Columbia to a student graduating from any four-year undergraduate degree program who demonstrates academic merit and contribution to the life of the University and/or to their community in the areas of inclusion, democracy, and/or reconciliation. Contributions in the area of inclusion refer to the promotion of diversity and inclusion and demonstration of strong collaboration and unifying efforts through the promotion and display of tolerance and respect for others. Contributions in the area of democracy refer to the strengthening of democracy through civic engagement or the advancement of human rights and demonstration of the recognition of the fundamental rights and dignity of all persons at a local, national, or global level. Contributions in the area of reconciliation refers to action taken to transform society by establishing a renewed relationship with Indigenous peoples and efforts undertaken to heal communities. This award has no monetary value. The award is made on the recommendation of the Lieutenant Governor's Medal Committee. (First award available for the 2018/2019 winter session)

Okanagan Senate THE UNIVERSITY OF BRITISH COLUMBIA



Appendix B: Curriculum Report

FROM THE FACULTY OF APPLIED SCIENCE

ENGR 424

ENGR 441

ENGR 448

ENGR 457

FROM THE FACULTY OF CREATIVE AND CRITICAL STUDIES

ENGL 109

ENGL 155, DIHU 155

ENGL 430

FREN 457

HEBR 101, HEBR 102

FROM THE FACULTY OF EDUCATION

Post-Baccalaureate Education Program

FROM THE FACULTY OF HEALTH AND SOCIAL DEVELOPMENT

HEAL 101

25 April 2019

Docket Page 14 of 180 Office of the Senate





Office of the Senate
University Centre | UNC 322
3333 University Way
Kelowna, BC Canada V1V 1V7
www.senate.ubc.ca/okanagan

10 April 2019

To: Okanagan Senate

From: Learning and Research Committee

Re: Memorial Minute

The Learning and Research Committee has prepared memorial minutes for the following individual:

Professor William Wesley Pue

Motion: That Senate approve the Memorial Minutes for Prof. W. Wesley Pue, that they be entered into the Minutes of Okanagan Senate, and a copy be sent to the family of the deceased and forwarded to the Vancouver Senate.

Respectfully submitted,

Dr. Deborah Roberts, Chair Senate Learning and Research Committee

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 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.



FISCAL ENVIRONMENT

- Domestic FTE growth projected at 2% (108% of funded target)
- International FTE growth projected at 11%
- Entering bargaining for new salary agreements (FA, AAPS, BCGEU)

STRATEGY

- Enhancing services to support core academic mission (Finance/IT restructure, Food Services to in-house)
- Investments in teaching, research and office space needs (Innovation Drive, Greenhouse, Modular Lab and Office space)
- IRP systems renewal, ARC Investment
- Okanagan Housing strategy: Nechako and Skeena
- Infrastructure: Innovation Precinct, District Energy improvements





FUNDING CONTEXT – 2019/20

- Balanced operating budget, with 2018/19 surplus carrying forward to 2019/20
- Incremental grant funding for program expansion in manufacturing engineering and computer science, with 60% funding to Faculties (\$0.4m)
- Domestic tuition rate increase of 2% per year
- International tuition rate increases (4% new, 3% continuing)
- Estimated Tuition Allocation Model incremental central allocations to Faculties \$3.6m, Excellence Fund \$2.3m and SFA \$0.7m
- Excellence Fund balance at \$8.5m in FY20 (recurring)
- Total proposed allocations of \$10.3m, including commitments for staff salaries, multi-year term positions



FINANCIAL RISKS

- Grant funding to support GWI and Employee Health Tax (EHT)
- International Student Enrolment
- Integrated Renewal Project Upgrade
- Construction inflation; impact on lab/classroom retrofits, renovations
- Foreign Exchange
- Salary inflation (driven by collective agreements) exceeding incremental revenue



TUITION ALLOCATION MODEL

Overview

The Tuition Allocation Model provides a driver based framework for the allocation of tuition revenue to the respective faculties. Starting in fiscal 2014/15, allocations were made based on enrolment in courses taught for undergraduate programs and post-baccalaureate program students paying per credit tuition, and tuition assessed for graduate programs.

Components

Domestic tuition

Faculty receives 60% and Central 40%, <u>after</u> allocations for credit card fees (0.125%), bad debts (1%) and student financial aid (7.25%)

International - Base tuition

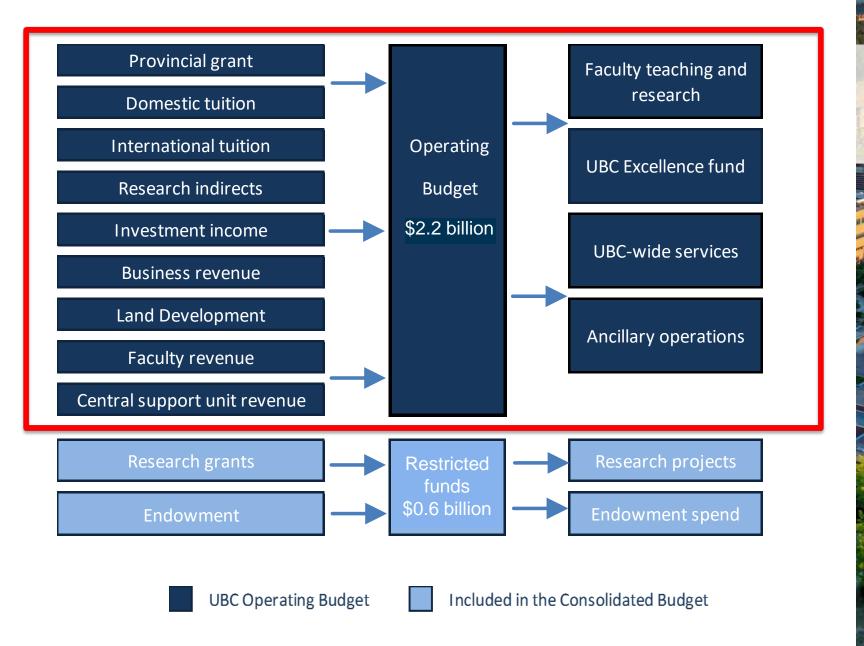
Faculty receives 50% and Central 50%, <u>after</u> allocations for credit card fees (0.125%), bad debts (1%) and student financial aid (7.47%)

International - Incremental tuition

Tuition related to the international fee increase implemented in 2016/17 are split 2/3 to the Excellence fund and 1/3 to Faculties and Central after allocations for credit card fees (0.125%), bad debts (1%) and student financial aid (7.47%). Faculty receives 50% and Central 50% of the leftover amount.



BUDGET FRAMEWORK



UBC - CONSOLIDATED PERSPECTIVE

Operating Revenue	UBC Vancouver			er	UBC Okanagan				UBC Total			
(in \$millions)	Actual Fiscal 17/18	Forecast Fiscal 18/19	Budget Fiscal 19/20	Budget vs. Forecast	Actual Fiscal 17/18	Forecast Fiscal 18/19	Budget Fiscal 19/20	Budget vs. Forecast	Actual Fiscal 17/18	Forecast Fiscal 18/19	Budget Fiscal 19/20	Budget vs. Forecast
Provincial government grants	546	567	585	18	69	70	72	2	615	637	657	20
Undergraduate tuition												
Domestic	193	200	207	7	35	37	39	2	228	237	246	9
International	268	318	359	41	32	46	54	8	300	364	413	49
Graduate tuition	75	82	88	6	4	6	7	1	79	88	95	7
Investment income	41	51	58	7	-	-	-	-	41	51	58	7
Research revenue	36	34	33	(1)	1	1	1	-	37	35	34	(1)
Business revenue	27	33	33	-	1	2	2	-	28	35	35	-
Land development proceeds	24	31	33	3		-	-	-	24	31	33	3
Subtotal	1,210	1,316	1,396	81	142	162	175	13	1,352	1,478	1,571	94
Faculty revenue	181	186	180	(6)	1	1	1	-	182	187	181	(6)
Central support unit revenue	406	428	435	7	10	11	9	(2)	416	439	444	5
Total Operating Revenue	1,797	1,930	2,011	82	153	174	185	11	1,950	2,104	2,196	93

Okanagan Senate





UBC - CONSOLIDATED PERSPECTIVE

Student Enrolment

Object on A ETE		18/19			19/20 (Projected)				
Student FTE	Vancouver	Okanagan	Total UBC	Vancouver	Okanagan	Total UBC	Change		
Undergraduate									
Domestic	31,111	6,626	37,737	31,129	6,775	37,904	0.4%		
International	10,032	1,327	11,359	10,079	1,473	11,552	1.7%		
Total	41,143	7,953	49,096	41,208	8,248	49,456	0.7%		
Graduate	8,128	779	8,907	8,330	805	9,135	2.6%		
Total	49,271	8,732	58,003	49,538	9,053	58,591	1.0%		

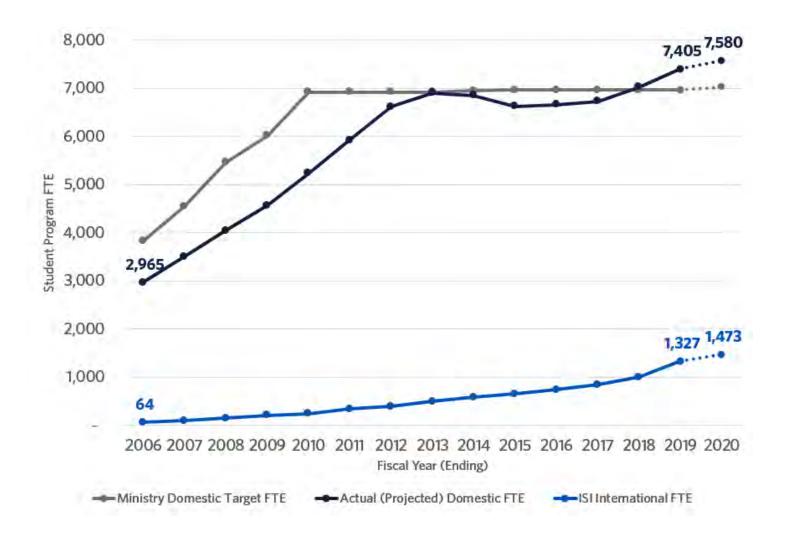
Okanagan Senate

Undergraduate Student Intake

Chi danti la ada acent		18/19		19	9/20 (Projected)	Chamma
Student Headcount	Vancouver	Okanagan	Total UBC	Vancouver	Okanagan	Total UBC	Change
Domestic	11,402	1,877	13,279	11,586	1,964	13,550	2.0%
International	3,744	522	4,266	3,652	518	4,170	-2.3%
Total	15,146	2,399	17,545	15,238	2,482	17,720	1.0%



UBCO – STUDENT FTE ENROLMENT HISTORY













OPERATING FUND (\$MILLIONS)

	Plan	Forecast ¹	Plan	Increase/
	2018/19	2018/19	2019/20	(Decrease)
Revenues				
Domestic undergraduate tuition	36.7	37.1	38.6	1.5
International undergraduate tuition	39.0	46.4	54.1	7.7
Graduate tuition	5.2	5.9	6.6	0.7
Total Tuition Revenues	80.9	89.4	99.3	9.9
Provincial government	69.9	70.3	72.3	2.0
Research revenues	1.1	1.3	1.3	-
Business revenues	1.6	1.7	1.8	0.1
Total Central Revenues	153.5	162.7	174.7	12.0
Faculty revenues	0.6	0.7	0.6	(0.1)
Central support unit revenues	9.5	11.0	9.5	(1.5)
Total including departmental operating revenues	163.6	174.4	184.8	10.4







¹ Forecast is based on projection as at Q3 FY19 forecast.

2019/20 OPERATING BUDGET ALLOCATIONS (\$MILLIONS)

Available Funds	One-time	Recurring	Total Fiscal
Operating prior year surplus ¹	6.5	4.3	10.8
Incremental revenue for 2019/20	-	12.0	12.0
Total Available for Allocation	6.5	16.3	22.8
Less Allocations:			
Faculty share of tuition growth	-	(3.6)	(3.6)
Excellence Fund	-	(2.3)	(2.3)
SFA	-	(0.7)	(0.7)
Faculty share of incremental grant	-	(0.4)	(0.4)
GWI and ESD funding	0.1	(1.3)	(1.2)
International tuition retained risk	-	(1.2)	(1.2)
Balance Available for Allocation	6.6	6.8	13.4







¹ Estimated operating prior year surplus after \$5.3m contribution to capital reserve.

2019/20 OPERATING BUDGET ALLOCATIONS BY PORTFOLIOS (\$MILLIONS)

	One-time	Recurring	Total Fiscal
Balance Available for Allocation	6.6	6.8	13.4
Less Proposed Allocations and Commitments:			
Provost and VP Academic	(0.9)	(0.4)	(1.3)
Vice Principal Research and Innovation	(0.7)	(0.3)	(1.0)
Deputy Vice Chancellor	-	(0.4)	(0.4)
AVP Finance and Operations	(2.7)	(1.3)	(4.0)
AVP Students	(0.3)	(0.8)	(1.1)
Student Financial Aid	(0.1)	(0.9)	(1.0)
Central commitments, including salary support	(0.1)	(1.4)	(1.5)
Total Proposed Allocations and Commitments	(4.8)	(5.5)	(10.3)
Operating contingency fund balance	(1.8)	(1.3)	(3.1)
Net Balance Available		-	-







OPERATING FUND BY PORTFOLIO (\$MILLIONS)

	Forecast ¹	Plan ²
	2018/19	2019/20
Allocations and unit revenues 3		
Faculties	82.1	85.5
Provost and VP Academic	12.7	13.2
Excellence Fund	2.4	3.6
Vice Principal Research and Innovation	4.7	5.7
Office of Deputy Vice-Chancellor and Principal	1.4	1.5
Development and Alumni Engagement	2.0	2.2
Human Resources	1.8	2.6
University Relations	2.4	2.5
AVP Finance and Operations	34.4	36.1
AVP Students	10.7	11.8
Student Financial Aid	11.7	12.6
Contribution to UBCV	4.2	4.2
Campus wide expenses ⁴	3.6	2.3
Use of Prior Year Surplus	0.3	1.0
Total Allocations and unit revenues	174.4	184.8

¹ Forecast is based on projection as at Q3 FY19 forecast





² Plan is based on preliminary allocations, pending Board approval.

³ Funding allocations reflect fiscal funding allocations and departmental revenues.

⁴ Campus wide expenses includes Debt servicing, Benefits, and Salary increase provision

HISTORICAL CONTEXT (5-YEAR COMPARISON)

For presentation: expressed in \$M

(\$m)	Fiscal Allo	cations¹	Change					
	15/16 Actuals	19/20 Plan	Fiscal (\$)	% of Total	Growth (%)			
Faculties	64.5	84.8	20.3	38%	32%			
Provost and Vice-Principal Academic	10.0	14.0	4.0	7%	39%			
Excellence Fund ²	-	3.6	3.6	7%	100%			
Vice-Principal Research and Innovation	2.5	5.3	2.8	5%	112%			
Office of the Deputy Vice- Chancellor and Princial	1.3	1.5	0.2	0%	13%			
Development and Alumni Engagement	1.6	2.1	0.5	1%	30%			
Human Resources	1.2	1.8	0.6	1%	56%			
University Relations	1.3	2.6	1.3	2%	95%			
AVP Finance and Operations	17.9	25.9	8.0	15%	44%			
Project Services 3	-	4.2	4.2	8%	100%			
AVP Students	5.8	8.8	3.0	6%	52%			
Student Financial Aid	7.3	12.6	5.3	10%	73%			
Contributions to UBCV 4	3.8	4.2	0.4	1%	10%			
Campus-wide Expenses	4.6	3.3	(1.3)	(2%)	(24%)			
Total Funding Allocations	121.8	174.7	52.9	100%	43%			

¹ Fiscal allocations exclude departmental revenues



² Includes unallocated Excellence Funds

³ All capital expenses are now managed centrally through Project Services

⁴ Contributions to UBCV exclude exchange and application fees

5 YEAR FISCAL FUNDING COMPARISON (\$000s)

(\$000's)								Avg. Annual
	2015/16	2016/17	2017/18	2018/19	19/20 Plan 2	FY19 - FY20	FY19 - FY20	Change (%)
Faculties 3	64,494	68,711	74,186	81,327	84,834	3,507	4%	7%
Faculty of Applied Science	8,600	10,128	11,201	12,879	14,371	1,493	12%	14%
Irving K. Barber School of Arts and Sciences	26,184	28,132	30,492	33,450	35,800	2,350	7%	8%
Faculty of Creative and Critical Studies	9,155	9,478	10,665	10,797	10,863	66	1%	4%
Faculty of Education	3,425	3,510	3,485	3,856	3,998	142	4%	4%
Faculty of Health and Social Development	10,779	11,380	11,863	12,209	12,759	549	4%	4%
Faculty of Management	4,559	4,354	4,724	5,853	6,059	206	4%	8%
College of Graduate Studies	800	833	999	898	1,044	147	16%	8%
Faculty Initiatives Fund	500	405	265	779	(626)	(1,405)	(180%)	(10%)
Salary and benefit provision	492	492	492	605	565	(40)	(7%)	4%
Provost and Vice-Principal Academic	10,009	10,941	12,547	15,035	17,535	2,500	17%	15%
Office of the Provost and Vice-Principal Academic	1,269	1,681	1,470	2,184	2,216		1%	17%
Cross-Faculty Initiatives	· -	25	438	93	215		132%	N/A
Centre for Teaching and Learning	789	822	879	917	945		3%	5%
Library Services	3,589	3,607	3,781	4,137	4,289	153	4%	5%
Enrolment Services	3,207	3,274	3,189	3,759	3,957	199	5%	6%
International Student Initiative (ISI)	780	834	861	927	975	47	5%	6%
Planning and Institutional Research	281	439	375	498	567	69	14%	22%
Equity Office	94	127	142	163	772	609	374%	109%
Excellence Fund	-	132	1,412	2,358	3,598	1,240	53%	N/A
Vice-Principal Research and Innovation	2,501	2,988	4,245	4,356	5,298	942	22%	21%
Office of the Vice-Principal Research and Innovation ⁶	768	1,047	1,905	2,210	2,078		(6%)	32%
Office of Research Services	499	614	583	638	755		18%	11%
Innovation UBC	227	229	236	236	654	418	177%	45%
Research Institutes	224	204	355	377	362			0%
Core Research Facilities	266	228	571	227	280	53	23%	0%
Survive and Thrive Applied Research (STAR)	517	665	387	485	308	(177)	(37%)	(6%)
Strategic Research Initiatives	-	-	209	183	862		372%	N/A





¹ Fiscal funding allocations exclude departmental revenues.

² Plan is based on preliminary allocations, pending Board approval.

³ Faculty allocations for 18/19 and 19/20 subject to final enrolments under tuition allocation model

⁴ Project costs are capital in nature and managed under Project Services as of FY17. Previously, costs were managed by individual units.

⁵ Shift in Contingency allocations starting in 17/18 due to Capital contingency allocations moved under Operating Funds.

⁶ Partnered Innovation Initiatives and Strategic Research Infrastructure funding have been moved from Office of the VPRI to Innovation UBC and Strategic Research Initiatives respectively for 19/20.

5 YEAR FISCAL FUNDING COMPARISON (\$000s)

(\$000's)	2015/16	2016/17	2017/18	2018/19	19/20 Plan ²	Change (\$) FY19 - FY20	Change (%) FY19 - FY20	Avg. Annual Change (%)
Deputy Vice-Chancellor	5,412	6,025	6,449	7,286	7,968		9%	10%
Office of the Deputy Vice-Chancellor and Principal	1,287	1,236	1,299	1,302	1,449	147	11%	3%
Alumni	270	280	338	408	432	25	6%	13%
Development	1,372	1,414	1,459	1,513	1,704	191	13%	6%
Human Resources	1,166	1,352	1,391	1,635	1,821	186	11%	12%
University Relations	1,003	1,353	1,613	2,086	2,198	112	5%	22%
Ceremonies	314	389	349	343	364	21	6%	5%
AVP Finance and Operations	18,048	19,457	25,581	27,940	30,094	2,154	8%	14%
Office of the AVP Finance and Operations	407	392	394	430	438	8	2%	2%
Finance	1,728	1,726	1,869	2,002	2,253	251	13%	7%
IT, Media, and Classroom Services	5,108	5,495	6,157	6,784	8,390	1,606		13%
Office of Campus Operations and Risk Management (CORM)	173	277	245	710	950			68%
Health Safety and Environment	259	258	268	_	-	-	0%	(32%)
Facilities	5,407	6,075	8,389	6,999	7,449	450	6%	10%
Energy		· -	· ·	-	623	623	0%	N/A
Utilities	2,514	2,514	2,514	2,514	2,514	-	0%	0%
Security	1,414	1,445	1,523	1,553	1,711	158	10%	5%
Project Services 4	137	122	1,869	5,017	4,215	(803)	(16%)	N/A
Office of Campus Planning and Development (CPD)	118	255	337	197	264	67		35%
Campus Planning and Development	274	312	1,363	1,126	417	(709)	(63%)	68%
Space Planning	-	121	161	280	481	201	72%	N/A
Sustainability	506	465	491	328	389	61	19%	(4%)
AVP Students	5,799	6,009	6,160	7,443	8,835	1,391	19%	11%
Office of AVP Students	408	436	778	821	825	4	0%	23%
Athletics and Recreation	1,512	1,517	1,235	1,533	1,601	68	4%	3%
Community Service Learning	164	179	27	22	21	(1)	(5%)	(25%)
Aboriginal Programs and Services	399	617	534	667	775	108	16%	21%
Disability Resource Centre	616	536	494	777	1,016	239	31%	17%
Student Experience Office	518	507	693	697	844	146	21%	14%
Advising and Involvement Centre	728	765	799	848	914	67	8%	6%
Learning Support	167	154	159	168	260	92	55%	14%
Health and Wellness	803	786	798	881	1,236	355	40%	13%
International Programs and Services	403	439	610	756	874		16%	22%
Go Global	82	72	33	64	70	7	10%	9%
Sexual Violence Prevention and Response Office	-	-	-	210	399	189	90%	N/A

¹ Fiscal funding allocations exclude departmental revenues.





² Plan is based on preliminary allocations, pending Board approval.

³ Faculty allocations for 18/19 and 19/20 subject to final enrolments under tuition allocation model

⁴ Project costs are capital in nature and managed under Project Services as of FY17. Previously, costs were managed by individual units.

⁵ Shift in Contingency allocations starting in 17/18 due to Capital contingency allocations moved under Operating Funds.

⁶ Partnered Innovation Initiatives and Strategic Research Infrastructure funding have been moved from Office of the VPRI to Innovation UBC and Strategic Research Initiatives respectively for 19/20.

5 YEAR FISCAL FUNDING COMPARISON (\$000s)

(\$000's)	2015/16	2016/17	2017/18	2018/19	19/20 Plan ²	Change (\$) FY19 - FY20	Change (%) FY19 - FY20	Avg. Annual Change (%)
Student Financial Aid	7,322	7,670	8,649	11,219	12,641	1,422	13%	15%
Student Financial Aid - Graduate	2,045	2,052	2,074	2,107	2,057	(50)	(2%)	0%
Student Financial Aid - Undergraduate, Domestic	3,369	3,381	3,696	5,236	6,086	851	16%	17%
Student Financial Aid - Undergraduate, ISI	1,308	1,636	2,278	3,276	3,862	586	18%	32%
Student Financial Aid - Go Global	200	200	200	200	200	-	0%	0%
Work Study/Work Learn	400	400	400	400	436	36	9%	2%
Campus Wide Expenses	8,232	8,128	4,366	8,011	7,463	(549)	(7%)	7%
Benefits	355	355	355	329	332	3	1%	(2%)
Contingency 5	1,305	956	(2,266)	2,703	973	(1,730)	(64%)	(162%)
Contributions to UBCV - System Recoveries	3,817	3,921	3,904	4,187	4,201	14	0%	2%
Debt servicing	2,701	2,702	2,784	2,941	3,083	142	5%	3%
Salary increase provision	-	169	(641)	269	(1,151)	(1,421)	(527%)	N/A
Other	54	24	229	25	25	-	0%	175%
Total Funding Allocations	121,817	129,927	142,183	162,618	174,667	12,049	7%	9%

¹ Fiscal funding allocations exclude departmental revenues.







² Plan is based on preliminary allocations, pending Board approval.

³ Faculty allocations for 18/19 and 19/20 subject to final enrolments under tuition allocation model

⁴ Project costs are capital in nature and managed under Project Services as of FY17. Previously, costs were managed by individual units.

⁵ Shift in Contingency allocations starting in 17/18 due to Capital contingency allocations moved under Operating Funds.

⁶ Partnered Innovation Initiatives and Strategic Research Infrastructure funding have been moved from Office of the VPRI to Innovation UBC and Strategic Research Initiatives respectively for 19/20.

COMPOSITE REPORT SUMMARY ALL FACULTIES - 2012/13 - 2018/19

CAMPUS-WIDE (UBCO)							
(as of November 1; December 1 for Course FTE 2018/19)	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
FTE							
Tenure Stream Faculty FTE (Active, Teaching)	279	283	273	261	279	267	280
Non-tenure Stream Faculty FTE (Active, Teaching)	75	78	71	83	75	87	98
Total: Faculty FTE	354	360	344	344	354	354	378
Undergraduate course taught FTE	7,050	7,131	6,895	6,960	7,209	7,519	8,202
Annualized graduate FTE	511	529	587	604	647	712	779
FTE RATIOS							
U'grad course taught FTE/Tenure Stream Faculty FTE	25	25	25	27	26	28	29
U'grad course taught FTE/Total Faculty FTE	20	20	20	20	20	21	22
BUDGET RATIOS							
Board-approved operating budget, \$ millions	55	61	62	63	67	72	79
Budget/Total Faculty FTE (incl. Deans and Paid Leaves), \$ thousands	143	156	161	161	173	187	194
Budget/U'grad course taught FTE, \$ thousands	8	9	9	9	9	10	10
Budget/U'grad course taught FTE + Annualized grad FTE, \$ thousands	7	8	8	8	9	9	9
UNDERGRADUATE CLASS SECTION SIZE: WINTER SESSION							
% Sections with less than 10 students	9%	9%	9%	8%	7%	8%	7%
RESEARCH FUNDING							
Average research grant funding/Tenure Stream Faculty FTE, \$ thousands	49	49	39	53	63	77	
DEVELOPMENT/FUNDRAISING							
Average fundraising by Faculties/Total Faculty FTE, \$ thousands	-	-	-	3	7	7	8
Average campus wide fundraising/Total Faculty FTE, \$ thousands	-	-	-	13	16	21	20





COMPOSITE REPORT SUMMARY BY FACULTY - 2018/19

2018/19 FISCAL YEAR (as of November 1; December 1 for Course FTE)	APSO	EDUO	FCCS	FHSD	ARSC	MGMT	ALL
FTE							
Tenure Stream Faculty FTE (Active, Teaching)	46	10	49	44	122	9	280
Non-tenure Stream Faculty FTE (Active, Teaching)	6	5	23	24	32	8	98
Total: Faculty FTE	52	16	72	67	154	17	378
Undergraduate course taught FTE	1,441	229	950	1,034	3,945	603	8,202
Annualized graduate FTE	250	57	39	181	240	12	779
FTE RATIOS							
U'grad course taught FTE/Tenure Stream Faculty FTE	32	22	20	24	32	65	29
U'grad course taught FTE/Total Faculty FTE	28	15	13	15	26	36	22
BUDGET RATIOS							
Board-approved operating budget, \$ millions	13	4	11	12	33	6	79
Budget/Total Faculty FTE (incl. Deans and Paid Leaves), \$ thousands	232	212	140	178	197	326	194
Budget/U'grad course taught FTE, \$ thousands	9	16	11	12	8	10	10
Budget/U'grad course taught FTE + Annualized grad FTE, \$ thousands	8	13	11	10	8	9	9
UNDERGRADUATE CLASS SECTION SIZE: WINTER SESSION							
% Sections with less than 10 students	1%	19%	11%	10%	7%	3%	7%
RESEARCH FUNDING (not available until June 2019)							
Average research grant funding/Tenure Stream Faculty FTE, \$ thousands	-	-	-	-	-	_	
DEVELOPMENT/FUNDRAISING							
Average fundraising by Faculty/Total Faculty FTE, \$ thousands	15	20	1.4	9	7	11	8
3-year average (FY16-19) fundraising by Faculty/Total Faculty FTE, \$ thousands	8	8	0.7	10	6	6	6





COMPOSITE REPORT SUMMARY CLASS SIZE EXPANDED - 2018/19

2018/19 Class Size							
(Expanded)	APSO	EDUO	FCCS	FHSD	ARSC	MGMT	Total
5 or fewer students		1	12	3	17		33
6-9 Students	1	3	20	5	17	2	48
10-29 Students	22	8	116	11	138	4	299
30-99	63	3	152	33	233	33	517
100-199	52	6	3	16	75	29	181
200 or more students	5		1	9	43	2	60
Total	143	21	304	77	523	70	1,138
5 or fewer students	0%	5%	4%	4%	3%	0%	3%
6-9 Students	1%	14%	7%	6%	3%	3%	4%
10-29 Students	15%	38%	38%	14%	26%	6%	26%
30-99	44%	14%	50%	43%	45%	47%	45%
100-199	36%	29%	1%	21%	14%	41%	16%
200 or more students	3%	0%	0%	12%	8%	3%	5%
Total	100%	100%	100%	100%	100%	100%	100%



COMPOSITE REPORT SUMMARY BY FACULTY - 2017/18

2017/18 FISCAL YEAR (as of November 1)	APSO	EDUO	FCCS	FHSD	ARSC	MGMT	ALL
FTE							
Tenure Stream Faculty FTE (Active, Teaching)	42	13	45	44	118	6	267
Non-tenure Stream Faculty FTE (Active, Teaching)	4	4	22	21	28	8	87
Total: Faculty FTE	45	17	67	64	146	14	354
Undergraduate course taught FTE	1,347	162	864	984	3,732	430	7,519
Annualized graduate FTE	225	60	40	171	204	13	712
FTE RATIOS							
U'grad course taught FTE/Tenure Stream Faculty FTE	32	12	19	23	32	69	28
U'grad course taught FTE/Total Faculty FTE	30	9	13	15	26	30	21
BUDGET RATIOS							
Board-approved operating budget, \$ millions	11	3	11	12	30	5	72
Budget/Total Faculty FTE (incl. Deans and Paid Leaves), \$ thousands	223	172	145	174	191	290	187
Budget/U'grad course taught FTE, \$ thousands	8	21	12	12	8	11	10
Budget/U'grad course taught FTE + Annualized grad FTE, \$ thousands	7	16	12	10	8	11	9
UNDERGRADUATE CLASS SECTION SIZE: WINTER SESSION							
% Sections with less than 10 students	3%	18%	11%	11%	9%	2%	8%
RESEARCH FUNDING							
Average research grant funding/Tenure Stream Faculty FTE, \$ thousands	138	12	14	136	66	51	77
DEVELOPMENT/FUNDRAISING							
Average fundraising by Faculty/Total Faculty FTE, \$ thousands	2	7	0.4	12	10	4	7
3-year average (FY16-18) fundraising by Faculty/Total Faculty FTE, \$ thousands	5	5	0.5	10	6	5	6





COMPOSITE REPORT SUMMARY BY FACULTY – 2016/17

2016/17 FISCAL YEAR (as of November 1)	APSO	EDUO	FCCS	FHSD	ARSC	MGMT	ALL
FTE							
Tenure Stream Faculty FTE (Active, Teaching)	38	15	45	46	127	8	279
Non-tenure Stream Faculty FTE (Active, Teaching)	3	4	12	22	29	6	75
Total: Faculty FTE	41	19	56	68	155	14	354
Undergraduate course taught FTE	1,220	210	773	926	3,682	399	7,209
Annualized graduate FTE	197	54	39	163	185	9	647
FTE RATIOS							
U'grad course taught FTE/Tenure Stream Faculty FTE	32	14	17	20	29	48	26
U'grad course taught FTE/Total Faculty FTE	30	11	14	14	24	29	20
BUDGET RATIOS							
Board-approved operating budget, \$ millions	10	4	9	11	28	4	67
Budget/Total Faculty FTE (incl. Deans and Paid Leaves), \$ thousands	230	167	143	161	167	273	173
Budget/U'grad course taught FTE, \$ thousands	8	17	12	12	8	11	9
Budget/U'grad course taught FTE + Annualized grad FTE, \$ thousands	7	13	12	10	7	11	9
UNDERGRADUATE CLASS SECTION SIZE: WINTER SESSION							
% Sections with less than 10 students	1%	13%	14%	9%	5%	1%	7%
RESEARCH FUNDING							
Average research grant funding/Tenure Stream Faculty FTE, \$ thousands	143	17	10	94	55	12	63
DEVELOPMENT/FUNDRAISING							
Average fundraising by Faculty/Total Faculty FTE, \$ thousands	8	6	0.8	10	7	8	7
2-year average (FY16-17) fundraising by Faculty/Total Faculty FTE, \$ thousands	6	3	0.6	9	4	5	5





COMPOSITE REPORT SUMMARY BY FACULTY - 2015/16

2015/16 FISCAL YEAR (as of November 1)	APSO	EDUO	FCCS	FHSD	ARSC	MGMT	ALL
FTE							
Tenure Stream Faculty FTE (Active, Teaching)	31	17	44	41	118	10	261
Non-tenure Stream Faculty FTE (Active, Teaching)	6	3	17	24	27	7	83
Total: Faculty FTE	37	20	61	65	145	17	344
Undergraduate course taught FTE	1,053	240	790	866	3,585	425	6,960
Annualized graduate FTE	180	55	39	134	184	13	604
FTE RATIOS							
U'grad course taught FTE/Tenure Stream Faculty FTE	34	14	18	21	30	42	27
U'grad course taught FTE/Total Faculty FTE	28	12	13	13	25	25	20
BUDGET RATIOS							
Board-approved operating budget, \$ millions	9	3	9	11	26	5	63
Budget/Total Faculty FTE (incl. Deans and Paid Leaves), \$ thousands	186	150	132	161	160	241	161
Budget/U'grad course taught FTE, \$ thousands	8	14	12	12	7	11	9
Budget/U'grad course taught FTE + Annualized grad FTE, \$ thousands	7	12	11	11	7	10	8
UNDERGRADUATE CLASS SECTION SIZE: WINTER SESSION							
% Sections with less than 10 students	4%	8%	15%	6%	6%	0%	8%
RESEARCH FUNDING							
Average research grant funding/Tenure Stream Faculty FTE, \$ thousands	137	17	16	57	50	21	53
DEVELOPMENT/FUNDRAISING							
Average fundraising by Faculty/Total Faculty FTE, \$ thousands	5	0.5	0.4	7	2	3	3





COMPOSITE REPORT SUMMARY BY FACULTY - 2014/15

2014/15 FISCAL YEAR (as of November 1)	APSO	EDUO	FCCS	FHSD	ARSC	MGMT	ALL
FTE							
Tenure Stream Faculty FTE (Active, Teaching)	35	19	46	36	124	12	273
Non-tenure Stream Faculty FTE (Active, Teaching)	3	5	14	25	21	4	71
Total: Faculty FTE	38	24	60	61	145	16	344
Undergraduate course taught FTE	903	279	827	798	3,626	463	6,895
Annualized graduate FTE	174	63	40	120	180	9	587
FTE RATIOS							
U'grad course taught FTE/Tenure Stream Faculty FTE	26	15	18	22	29	38	25
U'grad course taught FTE/Total Faculty FTE	24	12	14	13	25	28	20
BUDGET RATIOS							
Board-approved operating budget, \$ millions	7	4	9	11	26	4	62
Budget/Total Faculty FTE (incl. Deans and Paid Leaves), \$ thousands	178	156	135	161	161	225	161
Budget/U'grad course taught FTE, \$ thousands	8	15	11	14	7	9	9
Budget/U'grad course taught FTE + Annualized grad FTE, \$ thousands	7	12	11	12	7	9	8
UNDERGRADUATE CLASS SECTION SIZE: WINTER SESSION							
% Sections with less than 10 students	3%	21%	13%	6%	9%	3%	9%
RESEARCH FUNDING							
Average research grant funding/Tenure Stream Faculty FTE, \$ thousands	84	6	6	65	39	16	39
DEVELOPMENT/FUNDRAISING							
Average fundraising by Faculty/Total Faculty FTE, \$ thousands	-	-	-	-	-	-	-





NOTES FOR COMPOSITE REPORT

Faculty and Staff

- 1 Values for FCCS, FHSD, and IKBSAS include Dean's Office, where applicable.
- 2 Faculty and staff data are valid as at 1 November of each year. Vacant positions (planned hires) as of the snapshot date are not included in totals.
- 3 Tenure Stream Faculty FTE includes all active ranks in the Professoriate (Full, Associate, and Assistant) and Teaching (Teaching Professor, Senior Instructor and Instructor) streams.
- 4 Non-tenure Stream Faculty FTE includes the following active ranks: Faculty Without Review, 12-month Lecturers, Sessional Lecturers, and Clinical Staff (FHSD).
- 5 Teaching FTE for faculty with dual roles (administrative and teaching) have been adjusted as follows: Deans, 0 FTE; Associate Deans and Directors, 0.25 FTE; Unit Heads, 0.50 FTE.
- Teaching FTE for faculty identified as research chairs (including Canada Research Chairs), endowed research chairs, industrial chairs, as well as those with grant tenure has been adjusted to 0.50 FTE.
- 7 Teaching FTE for Sessional Lecturers have been adjusted such that one Sessional Lecturer does not equal more than 1.0 FTE over the course of a fiscal year.

Students

- 1 Undergraduate course taught FTE includes all primary activity in Winter and Summer sessions. Calculated as (Enrolments * Credits) / 30.
- 2 Annualized Graduate FTE includes Summer and Winter session activity, assuming year-round enrollment. A full-time graduate student starting in September of one year and enrolled full-time throughout the Winter session would therefore equal 2/3 FTE.

Operating Budget

1 Operating budgets for historical fiscal years reflect approved actuals as at applicable year-end (31 March). Operating budgets for current fiscal year reflect forecasted totals as at second quarter-end (30 September). Totals are reported on a fiscal basis (inclusive of one-time and recurring funding allocations). Carry-forward balances are not reflected in operating budget totals.

Undergraduate Class Section Sizes

1 Includes primary activity, regular section types only. Excludes Summer Session activity. Excludes directed studies, practicums, work placements, wait-list, web, and thesis activity types. Excludes graduate course sections. Winter Session data are valid as at 1 November of each year. Excludes courses worth less than 3 credits.







CONSOLIDATED FINANCIAL STATEMENTS

For year ended March 31, 2018

Vancouver, B.C. Canada



Consolidated Financial Statements Year ended March 31, 2018

Statement of Management Responsibility

The consolidated financial statements of the University of British Columbia (the University) have been prepared by management in conformity with Canadian public sector accounting standards and Treasury Board direction outlined in note 2(a). The financial statements present the financial position of the University as at March 31, 2018, and the results of its operations, remeasurement gains and losses, and the changes in net debt and changes in its cash flow for the year ended March 31, 2018.

In fulfilling its responsibilities and recognizing the limits inherent in all systems, management has developed and maintains a system of internal control designed to provide reasonable assurance that University assets are safeguarded from loss and that the accounting records are a reliable basis for the preparation of financial statements.

The Board of Governors is responsible for reviewing and approving the financial statements, and overseeing management's performance of its financial reporting responsibilities.

The Board of Governors carries out its responsibility for review of the financial statements principally through its Audit Committee. No members of the Audit Committee are officers or employees of the University. The Audit Committee meets with management, the external auditors and the internal auditors to discuss the results of audit examinations and financial reporting matters. The external and internal auditors have full access to the Audit Committee, with and without the presence of management.

The financial statements for the year ended March 31, 2018 have been reported on by KPMG. The Independent Auditors' Report outlines the scope of the audit and provides the audit opinion on the consolidated financial statements.

Santa Ono

President and Vice-Chancellor

Peter Smailes

Interim Vice-President Finance & Operations

May 24, 2018



KPMG LLP PO Box 10426 777 Dunsmuir Street Vancouver BC V7Y 1K3 Canada Telephone (604) 691-3000 Fax (604) 691-3031

INDEPENDENT AUDITORS' REPORT

To the Board of Governors of the University of British Columbia, and
To the Minister of Advanced Education, Skills & Training, Province of British
Columbia

We have audited the accompanying consolidated financial statements of the University of British Columbia, which comprise the consolidated statement of financial position as at March 31, 2018, the consolidated statements of operations and accumulated surplus, remeasurement gains and losses, changes in net debt and cash flows, for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation of these consolidated financial statements in accordance with the financial reporting provisions of Section 23.1 of the Budget Transparency and Accountability Act of the Province of British Columbia, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.



We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements of the University of British Columbia as at March 31, 2018 and for the year then ended are prepared, in all material respects, in accordance with the financial reporting provisions of Section 23.1 of the Budget Transparency and Accountability Act of the Province of British Columbia.

Emphasis of Matter

Without modifying our opinion, we draw attention to note 2 to the consolidated financial statements which describes the basis of accounting and the significant differences between such basis of accounting and Canadian public sector accounting standards.

Chartered Professional Accountants

Vancouver, Canada June 14, 2018

KPMG LLP

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT MARCH 31

(in thousands of dollars)

		-	March 31 2018		March 31 2017
Financial Assets					
Cash and cash equivalents	(Note 3)	\$	231,171	\$	86,973
Accounts receivable			166,616		224,338
Inventories for resale			6,073		6,020
Investments	(Note 4)				
Operating			525,191		511,708
Endowment (expendable balance)			779,374		622,219
Investments in government business enterprises	(Note 5)	_	26,362		46,318
		_	1,734,787		1,497,576
Liabilities					
Accounts payable and accrued liabilities	(Note 7)		297,283		291,276
Employee future benefits	(Note 8b)		8,987		12,094
Deferred contributions	(Note 9)		1,115,806		966,280
Deferred capital contributions	(Note 10)		1,510,738		1,464,720
Deferred land lease revenue	(Note 11)		758,277		690,484
Debt	(Note 12)	_	355,235		360,401
		-	4,046,326		3,785,255
Net debt			(2,311,539)		(2,287,679)
Non-Financial Assets					
Tangible capital assets	(Note 13)		3,375,734		3,249,088
Investments					
Endowment (original contribution)	(Note 4)		942,455		916,053
Inventories held for use			2,015		2,116
Prepaid expenses		_	22,230		5,623
		_	4,342,434		4,172,880
Accumulated surplus		\$ _	2,030,895	\$	1,885,201
Accumulated surplus is comprised of:					
Accumulated surplus		\$	1,990,999	\$	1,844,820
Accumulated remeasurement gains		_	39,896	i.	40,381
		\$	2,030,895	\$	1,885,201

(Note 17)

Approved on behalf of the Board of Governors:

Contractual obligations and contingent liabilities

Michael Korenberg

Chair, Board of Governors

Peter Smailes

Interim Vice-President Finance and Operations

(See accompanying notes to the consolidated financial statements)



CONSOLIDATED STATEMENT OF OPERATIONS AND ACCUMULATED SURPLUS YEAR ENDED MARCH 31

(in thousands of dollars)

	-	Budget (Notes 2(p) and 20)		2018	2017
Revenues					
Government grants and contracts (Note 15)	\$	1,083,728	\$	1,077,096	\$ 1,058,952
Tuition and student fees		680,854		725,040	629,869
Sales and services		367,276		399,791	373,231
Non-government grants, contracts and donations		175,933		182,159	168,534
Investment income		82,239		81,825	69,280
Income from government business					
enterprises (Note 5)		2,382		13,763	11,032
Revenue recognized from deferred capital		05.074		04.040	77.440
contributions (Note 10)	-	85,074		81,848	77,412
	-	2,477,486		2,561,522	2,388,310
Expenses					
Learning		1,226,714		1,200,857	1,144,661
Research		473,393		496,441	473,021
Facilities		301,207		283,343	261,312
Students		303,486		318,571	291,067
Community engagement		57,959		60,018	52,027
Administration		81,329		81,763	74,455
	-	2,444,088		2,440,993	2,296,543
Annual surplus from operations		33,398		120,529	91,767
External endowment donations	=	30,000	· -	25,650	29,382
Annual surplus		63,398		146,179	121,149
Accumulated surplus, beginning of year		1,844,820		1,844,820	1,723,671
Accumulated surplus, end of year	\$	1,908,218	\$	1,990,999	\$ 1,844,820

(See accompanying notes to the consolidated financial statements)



CONSOLIDATED STATEMENT OF CHANGES IN NET DEBT YEAR ENDED MARCH 31

(in thousands of dollars)

		Budget (Notes 2(p) and 20)	-	2018	2017
Annual surplus Exclude items not affecting net debt:	\$	63,398	\$	146,179	\$ 121,149
Endowment donations and transfers		(30,000)		(26,402)	(30,247)
		33,398	-	119,777	90,902
Acquisition of tangible capital assets		(376,000)		(324,366)	(334,000)
Amortization of tangible capital assets		202,000	_	197,720	185,146
		(174,000)	=	(126,646)	(148,854)
Acquisition of inventories held for use		-		(4,585)	(4,985)
Acquisition of prepaid expense		-		(21,508)	(7,187)
Consumption of inventories held for use		-		4,686	5,010
Use of prepaid expense			_	4,901	9,802
	•		=	(16,506)	2,640
		(140,602)		(23,375)	(55,312)
Net remeasurement gains (losses)		-		(757)	12,958
Self-supported subsidiary other comprehensive income	•		=	272	332
Increase in net debt		(140,602)		(23,860)	(42,022)
Net debt, beginning of year		(2,287,679)		(2,287,679)	(2,245,657)
Net debt, end of year	\$	(2,428,281)	\$	(2,311,539)	\$ (2,287,679)

(See accompanying notes to the consolidated financial statements)



CONSOLIDATED STATEMENT OF CASH FLOWS YEAR ENDED MARCH 31

(in thousands of dollars)

	 2018	· <u>-</u>	2017
Cash provided from operating activities			
Annual surplus	\$ 146,179	\$	121,149
Add non-cash items:			
Amortization of tangible capital assets	197,720		185,146
Amortization of deferred capital contributions	(81,848)		(77,412)
Amortization of deferred land lease revenue	(8,040)		(6,681)
Change in employee future benefits	(3,107)		134
	 250,904		222,336
Change in non-cash operating working capital:			
Decrease (increase) in accounts receivable	57,722		(48,437)
Decrease in inventories	48		335
Decrease (increase) in prepaid expenses	(16,607)		2,615
Increase in accounts payable and			
accrued liabilities	 6,007		11,760
	298,074		188,609
Cash used in capital activities			
Tangible capital asset acquisitions	 (324,366)	· —	(334,000)
Cash used in investing activities			
Decrease (increase) in investment in government			
business enterprises	19,956		(5,171)
Net acquisitions in investments	(180,287)		(213,291)
·	 (160,331)		(218,462)
Cook provided from financing activities			
Cash provided from financing activities Net increase in deferred contributions	100 704		10E 027
	133,724		105,837
Net decrease in long-term debt Increase in deferred land lease revenue	(6,602) 75,833		(2,561)
	•		117,587
Increase in deferred capital contributions	 127,866		128,551
	 330,821		349,414
Increase (decrease) in cash and cash equivalents	144,198		(14,439)
Cash and cash equivalents, beginning of year	86,973		101,412
Cash and cash equivalents, end of year	\$ 231,171	\$	86,973
Supplemental cash flow information			
Cash paid for interest	\$ 20,553	\$	20,609
(See accompanying notes to the consolidated financial statements)			



CONSOLIDATED STATEMENT OF REMEASUREMENT GAINS AND LOSSES YEAR ENDED MARCH 31

(in thousands of dollars)

	 2018	_	2017
Accumulated remeasurement gains, beginning of year	\$ 40,381	\$_	27,091
Remeasurement (gains) losses realized and reclassified to the statement of operations from:			
Equity investments quoted in active market	(9,977)		(4,746)
Other investments designated at fair value	1,270		(2,191)
Unrealized gains (losses) generated during the year from:			
Equity investments quoted in active market	5,881		20,370
Other investments designated at fair value	2,069		(475)
Other comprehensive income from government business			
enterprises	 272	_	332
Net remeasurement gains (losses) for the year	(485)		13,290
Accumulated remeasurement gains, end of year	\$ 39,896	\$	40,381

(See accompanying notes to the consolidated financial statements)



Docket Page 51 of 180

(all tabular amounts are in thousands of dollars)

Notes to the Consolidated Financial Statements

1 Authority and Purpose

The University of British Columbia (UBC or the University) operates under the authority of the *University Act* of British Columbia. UBC is a comprehensive research university offering a full range of undergraduate, graduate and continuing studies programs. The academic governance of the University is vested in the Senate. As a not-for-profit entity, UBC is governed by a Board of Governors, the majority of whom are appointed by the provincial government of British Columbia. UBC is also a registered charity and is therefore exempt from income taxes under section 149 of the *Income Tax Act*.

2 Significant Accounting Policies

The consolidated financial statements of the University are prepared by management in accordance with the basis of accounting described below. Significant accounting policies of UBC are as follows:

(a) Basis of Accounting

The consolidated financial statements have been prepared in accordance with Section 23.1 of the Budget Transparency and Accountability Act of the Province of British Columbia supplemented by Regulations 257/2010 and 198/2011 issued by the Province of British Columbia Treasury Board.

The Budget Transparency and Accountability Act requires that the consolidated financial statements be prepared in accordance with the set of standards and guidelines that comprise generally accepted accounting principles for senior governments in Canada, or if the Treasury Board makes a regulation, the set of standards and guidelines that comprise generally accepted accounting principles for senior governments in Canada as modified by the alternate standard or guideline or part thereof adopted in the regulation.

Regulation 257/2010 requires all tax-payer supported organizations in the Schools, Universities, Colleges and Hospitals sectors to adopt Canadian Public Sector Accounting Standards (PSAS), as issued by the Public Sector Accounting Board (PSAB), without any PS4200 elections effective their first fiscal year commencing after January 1, 2012.

Regulation 198/2011 requires that restricted contributions received or receivable are to be reported as revenue depending on the nature of the restrictions on the use of the funds by the contributors as follows:

- (i) Contributions for the purpose of acquiring or developing a depreciable tangible capital asset or contributions in the form of a depreciable tangible capital asset are recorded and, referred to as deferred capital contributions and recognized in revenue at the same rate that amortization of the related tangible capital asset is recorded. The reduction of the deferred capital contributions and the recognition of the revenue are accounted for in the fiscal period during which the tangible capital asset is used to provide services.
- (ii) Contributions restricted for specific purposes other than those for the acquisition or development of a depreciable tangible capital asset are recorded as deferred contributions and recognized in revenue in the year in which the stipulation or restriction on the contributions have been met.

For British Columbia tax-payer supported organizations, these contributions include government transfers and externally restricted contributions.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

(a) Basis of Accounting (continued)

The accounting policy requirements under Regulation 198/2011 are significantly different from the requirements of PSAS which require that:

- government transfers, which do not contain a stipulation that creates a liability, be recognized as revenue by the recipient when approved by the transferor and the eligibility criteria have been met in accordance with PS3410; and
- externally restricted contributions be recognized as revenue in the period in which the resources are used for the purpose or purposes specified in accordance with PS3100.

As a result, revenue recognized in the Statement of Operations and Accumulated Surplus and certain related deferred capital contributions would be recorded differently under PSAS.

(b) Basis of Presentation

The University reports its operations on a consolidated basis, which includes activities from various funds within the University and external entities.

(c) Basis of Consolidation

(i) Consolidated Entities

The consolidated financial statements reflect the assets, liabilities, revenues, and expenses of organizations which are controlled by UBC. Controlled organizations are consolidated except for government business enterprises which are accounted for by the modified equity method. Interorganizational transactions, balances, and activities have been eliminated on consolidation.

The following not-for-profit organizations whose activities are intended to benefit UBC are 100% controlled by the University and are consolidated in these financial statements:

- UBC Foundation, a not-for-profit foundation formed to develop public awareness and encourage financial support of the University.
- American Foundation for UBC, an American charitable foundation that encourages financial support of the University.
- Hong Kong Foundation for UBC, a not-for-profit organization incorporated in Hong Kong that promotes and advances all matters concerning education.
- UK Foundation for the University of British Columbia, an official charitable organization in the United Kingdom that promotes and advances all matters concerning education.
- UBC Society for the Education of Young Children, a not-for-profit organization that maintains and operates an educational program for young children.
- UBC Asia Pacific Regional Office Limited, a Hong-Kong based association formed to promote and advance the academic and research interests of the University and its partners in the Asia Pacific region.
- entrepreneurship@UBC Management Inc., a not-for-profit organization that allows UBC to make seed investments in promising student ventures.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

- (c) Basis of Consolidation (continued)
 - (i) Consolidated Entities (continued)

The following for-profit entities are controlled by the University and are consolidated in these financial statements:

- UBC Investment Management Trust, whose primary purpose is to manage the investment assets of the University's endowment fund and the staff pension plan. The University has a 100% interest in the trust.
- UBC Research Enterprises Inc., which promotes the creation, testing, development, production and commercialization of intellectual property owned by the University. The entity was dissolved by way of voluntary dissolution under the B.C. Business Corporations Act on December 4, 2017. The University held a 100% interest in the company prior to its dissolution.
- Paragon Testing Enterprises Inc., an English language testing organization that administers English language proficiency tests and develops products and programs to help test takers. The University has an 83% interest in the company.
- (ii) Investment in Government Business Enterprises

Government business enterprises are accounted for by the modified equity method. Under this method, the University's investment in the business enterprise and its net income and other changes in equity are recorded. No adjustment is made to conform the accounting policies of the government business enterprise to those of UBC other than if other comprehensive income exists, which is accounted for as an adjustment to accumulated surplus (deficit) of the University. Inter-organizational transactions and balances have not been eliminated, except for any profit or loss on transactions between entities of assets that remain within the entities controlled by UBC.

The following organizations are government business enterprises and are accounted for by the modified equity method:

UBC Properties Investments Ltd. ("UBCPIL")

UBCPIL is incorporated pursuant to the B.C. Business Corporations Act, and is a wholly-owned subsidiary of UBC. UBCPIL is the sole trustee of UBC Properties Trust, which was established to carry out real estate development activities on behalf of the University.

Great Northern Way Campus Trust

The University has a 25% (2017 - 25%) interest in the Great Northern Way Campus Trust (the Trust). The Trust was formed on September 15, 2002 to include the lands and premises comprising the Great Northern Way Campus for the equal benefit of the University, Simon Fraser University, British Columbia Institute of Technology and the Emily Carr Institute of Art and Design.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

(c) Basis of Consolidation (continued)

(iii) Investment in Government Partnerships

Government partnerships that are business partnerships are accounted for by the modified equity method. Accounting policies of the business partnership are not conformed to those of the partners before the equity pick-up. The University is not party to any government business partnerships.

Government partnerships that are not business partnerships are accounted for under the proportionate consolidation method. The University accounts for its share of the partnership on a line by line basis in the financial statements and eliminates any inter-organizational transactions and balances. Accounting policies of a partnership that is not a business partnership are conformed to those of UBC before it is proportionately consolidated.

The consolidated financial statements include the accounts of the following non-business government partnerships:

Tri-Universities Meson Facility (TRIUMF)

The University has a 7.69% (2017 – 8.33%) interest in TRIUMF. TRIUMF is a joint venture amongst the University and twelve other universities (2017 – eleven), which was established to operate a facility for research in sub-atomic physics. TRIUMF operates on the UBC campus and elsewhere.

Western Canadian Universities Marine Sciences Society (WCUMSS)

The University has a 20% (2017 – 20%) interest in WCUMSS. The University is one of five university members of WCUMSS, which is formed to provide a permanent base for marine and coastal-oriented field operations in Bamfield, B.C. WCUMSS mandates to provide research infrastructure for scientists, offer senior undergraduate and graduate courses and programs, and provide training opportunities for students, First Nations and other public groups.

• CDRD Ventures Inc. (CVI, formerly DDI Drug Development Inc.)

The University has a 33% (2017 – 33%) interest in CVI and is one of three shareholders. CVI is the commercialization partner of the Centre for Drug Research and Development, which provides financial, managerial and development support to turn promising technologies into companies and to help existing companies grow.

(iv) Trusts Under Administration

Trusts administered by UBC as directed by agreement or statute for certain beneficiaries are not included in the University's consolidated financial statements.

(d) Cash and Cash Equivalents

Cash and cash equivalents include highly liquid investments with a term to maturity of three months or less at the date of purchase.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

(e) Revenue Recognition

(i) Restricted Revenue

The University follows the deferral method of accounting for contributions. Some contributions, such as grants and donations for research or capital purposes, are restricted in use by the external contributor. Externally restricted contributions are recognized as revenue when the restrictions imposed by the contributors on the use of the monies are satisfied as follows:

- Non-capital contributions for specific purposes are recorded as deferred contributions and recognized as revenue in the year in which the stipulation or restriction on the contribution has been met. Unspent capital contributions are initially recorded as deferred contributions and transferred to and recorded as deferred capital contributions when the amounts have been spent on tangible capital assets and are recognized into revenue as noted below.
- Contributions spent in acquiring or developing a depreciable tangible capital asset or received in the form of a depreciable tangible capital asset, in each case for use in providing services, are recorded and referred to as deferred capital contributions and recognized in revenue at the same rate that amortization of the tangible capital asset is recorded. The reduction of the deferred capital contributions and the recognition of the revenue are accounted for in the fiscal period during which the tangible capital asset is used to provide services. Where the tangible capital asset involved has an unlimited life, the contribution is recorded in the Consolidated Statement of Operations and Accumulated Surplus.

Some restricted contributions must be retained in perpetuity, allowing only the investment income earned thereon to be spent, and are recorded as external endowment donations in the Consolidated Statement of Operations and Accumulated Surplus for the portion to be held in perpetuity and as deferred contributions for the investment income earned thereon.

(ii) Unrestricted Revenue

Unrestricted contributions are recorded as revenue when received or receivable if the amounts can be estimated and collection is reasonably assured. Government grants not restricted as to their use are recognized as revenue when received or receivable. Other unrestricted revenue, including tuition fees and sales of services and products, are reported as revenue at the time the services are provided or the products are delivered. Tuition fees received in advance of courses being delivered are deferred and recognized when the courses are delivered.

(iii) Deferred Land Lease Revenue

The University leases certain properties to third parties for a period of 99 years. Cash received from land leases is deferred and recognized as revenue over the term of the lease.

(iv) Investment Income

Investment income includes interest recorded on an accrual basis and dividends recorded as declared, realized gains or losses on the sale of investments, write-downs on investments where the loss in value is determined to be other than temporary, and fair value adjustment of investments. Investment transactions are recorded on a trade date basis. Transaction costs are expensed as incurred. To the extent that investment income relates to externally restricted endowments, income is recorded in the year in which the related expenses are incurred.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

(f) Financial Instruments

Classification. Disclosure and Presentation

Financial instruments are classified into two categories: fair value or cost.

Fair value category: Portfolio investments that are quoted in an active market, private equity investments, and sinking fund investments are all reflected at fair value as at the reporting date. Sales and purchases of investments are recorded on the trade date. Transaction costs related to the acquisition of investments are recorded as an expense. Unrealized gains and losses on financial assets, except those that are related to restricted endowments, are recognized in the Consolidated Statement of Remeasurement Gains and Losses until such time that the financial asset is derecognized due to disposal or impairment. At the time of de-recognition, the related realized gains and losses are recognized in the Consolidated Statement of Operations and Accumulated Surplus and related balances reversed from the Consolidated Statement of Remeasurement Gains and Losses. Unrealized gains and losses on financial assets related to restricted endowments are included in deferred contributions.

Cost category: Gains and losses are recognized in the Consolidated Statement of Operations and Accumulated Surplus when the financial asset is derecognized due to disposal or impairment. Sales and purchases of investments are recorded on the trade date. Transaction costs related to the acquisition of investments are included in the cost of the related investments. Debt is measured at amortized cost.

(g) Short-term Investments

Short-term investments are defined to include highly liquid securities with terms to maturity of one year or less. Short-term investments are cashable on demand and are recorded at fair value.

(h) Inventories for Resale

Inventories held for resale, including books, food services, and gift shop items, are recorded at the lower of cost or net realizable value. Cost is determined using the weighted average basis. Cost includes invoice cost and other costs incurred in bringing the inventories to their present location and condition. Net realizable value is the estimated selling price less the estimated costs necessary to make the sale. Inventories are written down to net realizable value when the cost of inventories is estimated not to be recoverable. When circumstances that previously caused inventories to be written down below cost no longer exist, the amount of write-down previously recorded is reversed.

(i) Non-financial Assets

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

(i) Tangible Capital Assets

Tangible capital asset acquisitions are recorded at cost, which includes amounts that are directly attributable to acquisition, construction, development or betterment of the asset. Interest is not capitalized whenever external debt is issued to finance the construction of tangible capital assets. Donated assets are recorded at fair value at the date of donation. In unusual circumstances where fair value cannot be reasonably determined, the tangible capital asset would not be recognized. Transfers of capital assets from related parties are recorded at carrying value.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

(i) Non-financial Assets (continued)

(i) Tangible Capital Assets (continued)

Capital assets are amortized on a straight-line basis over their estimated useful life as shown below. Land is not amortized as it is deemed to have a permanent value.

Site improvements	15-80 years
Buildings	10-50 years
Building renovations	5-40 years
Furnishings, equipment and systems	3-10 years
Library books	10 years

Assets under construction are not amortized until the asset is available for productive use.

Tangible capital assets are written down when conditions indicate that they no longer contribute to UBC's ability to provide goods and services, or when the value of future economic benefits associated with the tangible capital assets are less than their net book value.

(ii) Leased Tangible Capital Assets

Leases which transfer substantially all of the benefits and risks incidental to ownership of property are accounted for as leased tangible capital assets. All other leases are accounted for as operating leases and the related payments are charged to expenses as incurred.

(iii) Unrecognized Assets

Major categories of unrecognized assets include works of art and historical collections, mineral resources, and licenses.

These assets cannot be reasonably measured for various reasons, including being priceless or irreplaceable, not intended for sale, intended for exhibition purposes, restricted for research and academic purposes, or an estimate of future benefits associated with the assets cannot be made due to their extraordinary nature.

(iv) Inventories Held for Use

Inventories held for use are recorded at the lower of cost and replacement cost.

Cost includes the original purchase cost, plus shipping and applicable duties. Replacement cost is the estimated current price to replace the items.

(j) Employee Future Benefits

(i) Pension Plans

The University has two pension plans and a supplemental arrangement plan providing pension and other benefits to its employees. The assets and liabilities of these plans are not included in the University's consolidated financial statements.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

- (j) Employee Future Benefits (continued)
 - (i) Pension Plans (continued)

Faculty Pension Plan

The Faculty Pension Plan is a defined contribution plan providing benefits on a money purchase basis. The cost of pension benefits includes the current service cost based on 10.00% of salary (2017 – 10.00%), less a fixed offsetting amount relating to Canada Pension Plan contributory earnings. The University expenses contributions to this plan in the year the contributions are related to.

Staff Pension Plan

The Staff Pension Plan is a target benefit plan and provides benefits based on 1.80% (2017 – 1.80%) of the average best three years' basic salary multiplied by the number of years of contributory service. The University's contribution for the Staff Pension Plan is 9.13% of salary (2017 – 10.00%), less a fixed offsetting amount relating to Canada Pension Plan contributory earnings. In the event of funding deficiencies, the University's contributions remain fixed and benefits for members may be reduced. Accordingly, the University accounts for this as a defined contribution plan and expenses contributions to this plan in the year of the related contributions. Benefits security for employees is improved by the plan maintaining a contingency reserve. The contingency reserve ceiling recommended by the plan's actuary and approved by the pension board and Canada Revenue Agency is 40% of liabilities.

Supplemental Arrangement

The Supplemental Arrangement has been established for those Faculty Pension Plan members whose aggregate annual pension contributions exceed the contribution limit allowed under the Income Tax Act for registered plans. Excess University contributions are deposited into notional accounts established for each member in the Supplemental Arrangement account. No payments are made out of the Supplemental Arrangement account before the earliest of the member's termination, retirement or death.

(ii) Income Replacement Plan / Disability Benefit Plan

The income replacement plan for faculty and disability benefit plan for all other employees provide income for disabled employees. The plans commence after a qualifying period of four months for CUPE 2950 employees and six months for all other employees. When an employee is in receipt of income replacement or disability benefits, the University continues to pay the costs of certain member benefits. The costs of the plans are employee funded. The University is not required to contribute to the plans nor is it responsible for any deficit that the plans may incur.

(iii) Sick Leave Benefits

Sick leave benefits are available to UBC's employees. Employees are entitled to sick leave in accordance with the terms and conditions of their employment contracts. The costs of those benefits which vest or accumulate are actuarially determined based on service and estimates of retirement ages and expected future salary or wage increases. The obligation is accrued based on projected benefits as the employees render services necessary to earn the future benefits. Actuarial gains and losses are amortized over the expected average remaining service life of the employees. Actuarial gains and losses from event-driven benefits that do not vest or accumulate are recognized immediately.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

(k) Liability for Contaminated Sites

Contaminated sites are a result of contamination being introduced into air, soil, water or sediment of a chemical, organic or radioactive material or live organism that exceeds an environmental standard. Liabilities are recorded net of any expected recoveries. A liability for remediation of contaminated sites is recognized when all the following criteria are met:

- (i) an environmental standard exists;
- (ii) contamination exceeds the environmental standard;
- (iii) the University is directly responsible or accepts responsibility;
- (iv) it is expected that future economic benefits will be given up; and
- (v) a reasonable estimate of the amount can be made.

(I) Use of Estimates

The preparation of these consolidated financial statements in accordance with PSAS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. Significant areas requiring the use of management estimates and assumptions relate to the determination of useful lives of tangible capital assets for amortization and the amortization of related deferred capital contributions, valuation of financial instruments, the present value of employee future benefits and commitments, and provisions for contingencies. Where actual results differ from these estimates and assumptions, the impact will be recorded in future periods when the difference becomes known.

(m) Debt Issue Costs

The underwriting discount along with consulting fees relating to the debenture issuances are capitalized and amortized to match the term of the long-term debenture. Amortization is calculated based on the effective interest rate method.

(n) Asset Retirement Obligations

The University recognizes asset retirement obligations in the period in which it incurs a legal obligation associated with the retirement of a tangible long-lived asset including leased premises resulting from the acquisition, construction, development, and/or normal use of the asset. The fair value of the asset retirement cost is capitalized as part of the carrying value of the related long-lived asset and is depreciated over the life of the asset. The liability may be changed to reflect the passage of time and changes in the fair value assessment of the retirement obligation.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

(o) Functional Classification of Expenses

Expenses in the Consolidated Statement of Operations and Accumulated Surplus have been classified based upon functional lines of service provided by the University. The outline of services provided by each function is as follows:

- (i) Learning This function includes expenses related to all direct educational delivery within the institution and activities that directly support the academic functions of the institution. This includes credit and non-credit courses, diploma, certificate and degree programs; continuing education; curriculum and program development; libraries and galleries; on-line delivery; information technology; specific purpose funding; and endowment non-award funding. Costs associated with this function include contract expenses; Deans/Directors and/or Chairs; and instructional administration (general and financial), support staff and support costs directly related to these activities.
- (ii) Research This function includes research activities specifically funded by contracts and/or grants from external organizations and undertaken within the institution to produce research outcomes. Costs associated with this function include such things as research administration, research accounting, support costs established to conduct all research projects, and research related amortization.
- (iii) Facilities This function includes all capital asset related expenditures for the operation of the University. These include the operation and maintenance of physical plant and equipment for all institutional activities; utilities; facilities administration; custodial services; landscaping and grounds keeping; major repairs and renovations; security services; administration of infrastructure development; amortization expense (other than research related) and debt servicing costs related to the entire University.
- (iv) Students This function includes activities that directly support the individual students or groups of students. These include student service administration; counseling; career services; social development and recreation; financial aid administration; scholarships and bursaries; and any other centralized general and financial administration and support costs related to these activities. It also includes ancillary operations that provide goods and services to the students, endowment award related funding and award funds that support students. Costs associated with this function include general and financial administration and support costs directly related to these activities.
- (v) Community engagement This function includes activities that support the relationship between the University and the community. It includes campus planning; advancement and development office; alumni; public / government relations; community affairs, and any other centralized institution wide external affairs. Costs associated with this function include general, financial administration and support costs directly related to these activities.
- (vi) Administration This function includes activities that support the institution as a whole, such as executive management; governance committees; the Board and Senate; corporate finance; human resources; purchasing; and any other centralized institution-wide general administrative activities.



(all tabular amounts are in thousands of dollars)

2 Significant Accounting Policies (continued)

(p) Budget Figures

The original budget was approved by the Board of Governors on April 13, 2017 The budget reflected in the Consolidated Statement of Operations and Accumulated Surplus was amended subsequent to approval by the Board of Governors to reflect the University's revised methodology for presenting the functional classification of expenses. Note 20 reconciles the approved budget to the budget information presented in these consolidated financial statements.

3 Cash and Cash Equivalents

	<u>-</u>	March 31 2018	 March 31 2017
Cash	\$	25,473	\$ 29,119
Cash equivalents		205,698	57,854
	\$ <u></u>	231,171	\$ 86,973

The University has a seasonal revolving line of credit. During September 1 to May 31, the line of credit is CAD \$40 million, and during June 1 to August 31, the line of credit is increased to CAD \$60 million. This operating facility includes, as a sub-limit, a US dollar current account overdraft facility up to US \$5 million. As at March 31, 2018, the University had a CAD \$40 million revolving line of credit (March 31, 2017 - \$40 million) with a sub limit of US \$5 million line of credit (March 31, 2017 - \$5 million).

4 Investments

Investments include operating, endowment and sinking fund investments. Operating investments consist of research, capital, and other funds received and held in advance for future expenditures. Endowment investments consist of donations held in perpetuity and land lease revenues received by the University to benefit current and future generations. Sinking fund investments are managed by the provincial government and will be applied against repayment of provincial debentures on maturity (Note 12).

(a) Analysis of Investments

	 March 31 2018	 March 31 2017
Government and corporate bonds Maturity		
Less than 1 year	\$ -	\$ 51,045
1 - 5 years	534,814	461,650
Greater than 5 years	-	4,987
Various – pooled	230,190	199,272
	 765,004	 716,954
Short-term notes and treasury bills	27,403	15,803
Canadian equities	221,311	224,431
Canadian pooled funds	212,237	297,897
United States equities and pooled funds	180,358	148,933
Other international pooled funds	842,858	618,890
Other	24,809	49,743
	\$ 2,273,980	\$ 2,072,651



(all tabular amounts are in thousands of dollars)

4 Investments (continued)

(a) Analysis of Investments (continued)

These investments are presented in the consolidated financial statements as:

	 March 31 2018	 March 31 2017
Operating investments Endowment (expendable balance)	\$ 525,191 779,374	\$ 511,708 622,219
Endowment (original contribution)	942,455	916,053
Sinking fund investments (Note 12)	26,960	22,671
	\$ 2,273,980	\$ 2,072,651

Other investments include cash and short-term investments related to endowments and real estate investments and promissory notes issued by unrelated parties.

(b) Endowment Investments

(i) Endowment investments are reported as financial assets (expendable portion) and non-financial assets (externally restricted principal portion). The portion reported as non-financial assets comprise investments representing the original donation and amounts required to be reinvested to maintain the capital, which are externally restricted by donors and, therefore, cannot be spent and are not considered financial assets.

		March 31, 2018	March 31, 2017			
	<u>Principal</u>	Expendable Total	<u>Principal</u>	<u>Expendable</u>	<u>Total</u>	
Balance, beginning of year	\$ 916,053	\$ 622,219 \$ 1,538,	272 \$ 885,806	\$ 576,199	\$ 1,462,005	
Donations	25,650	- 25	650 29,382	-	29,382	
Internal transfers	752	-	752 865	(2,085)	(1,220)	
Transfers to/from cash	-	75,000 75,	- 000	(90,000)	(90,000)	
Investment income	-	155,953 155	953 -	197,882	197,882	
Expenses		(73,798) (73,	798) -	(59,777)	(59,777)	
Balance, end of year	\$ 942,455	\$ 779,374 \$ 1,721,	829 \$ 916,053	\$ 622,219	\$ 1,538,272	

(ii) Endowments Held by Vancouver Foundation

Endowments with a fair value of \$25.7 million (March 31, 2017 – \$24.7 million) are held by the Vancouver Foundation in perpetuity for the benefit of the University and are not included in the University's consolidated financial statements. The capital of these endowment funds are held permanently by Vancouver Foundation and invested in accordance with the provisions of the Vancouver Foundations Act.



Docket Page 63 of 180

(all tabular amounts are in thousands of dollars)

4 Investments (continued)

- (b) Endowment Investments (continued)
 - (ii) Endowments Held by Vancouver Foundation (continued)

Endowments with a fair value of \$28.2 million (March 31, 2017 – \$27.2 million) are held and managed by Vancouver Foundation and are included in the University's consolidated financial statements. The University has the discretion to direct Vancouver Foundation to transfer the whole or any part of the capital of these endowment funds to the University.

(c) Fair Value of Financial Instruments

Fair value of a financial instrument is defined as the amount at which the instrument could be exchanged in a current transaction between willing parties. UBC uses the following methods and assumptions to estimate the fair value of each class of financial instruments for which the carrying amounts are included in the Consolidated Statement of Financial Position under the following captions:

- Cash and cash equivalents, accounts receivable and accounts payable and accrued liabilities the
 carrying amounts approximate fair value because of the short-term maturity of these instruments.
- Operating investments
- Endowment investments

The financial instruments measured at fair value held within each investment are classified according to a hierarchy which includes three levels, reflecting the reliability of the inputs involved in the fair value determination. The different levels are defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)



(all tabular amounts are in thousands of dollars)

4 <u>Investments (continued)</u>

(c) Fair Value of Financial Instruments (continued)

The composition of investments recorded at fair value is as follows:

		Quoted pr in activ markets identica assets	e Significant for other al observable	Significant unobservable inputs
March 31, 2018	Total	(Level 1	l) (Level 2)	(Level 3)
Endowment investments:				
Cash and short-term notes	\$ 37,26	0 \$ 3	7,260 \$	- \$ -
Fixed income mutual funds	97,51	5 9	7,515	
Canadian equities	321,38	4 32	1,384	
Canadian equities mutual funds	73,56	4 7	3,564	
United States equities mutual funds	97,19	3 9	7,193	
International equities mutual funds	576,24	9 52	9,834 46,415	
Real estate	135,94	0	-	- 135,940
Private equity	272,72	5	-	- 272,725
Hedge fund	80,22	3	-	- 80,223
Other	28,17	6		<u> </u>
Total endowment investments recorded at fair value	1,720,22	9 1,15	6,750 74,59°	1 488,888
Operating investments:				
Short-term investments		-	-	
Fixed income				
Government	508,82	8 50	8,828	
Mutual funds	1,00	0	-	- 1,000
Canadian equities	1,41	6	1,416	
United States equities		-	-	
Private equity	13,94	7	<u> </u>	13,947
Total operating investments recorded at fair value	525,19	1 51	0,244	- 14,947
Total	\$ 2,245,42	0 \$1,66	6,994 \$ 74,59 ⁻	1 \$ 503,835



(all tabular amounts are in thousands of dollars)

4 Investments (continued)

(c) Fair Value of Financial Instruments (continued)

March 31, 2017	_	Total		Quoted prices in active markets for identical assets (Level 1)		Significant other observable inputs (Level 2)	_	Significant unobservable inputs (Level 3)
Endowment investments:								
Cash and short-term notes	\$	38,486	\$	38,486	\$	-	\$	_
Fixed income mutual funds		95,915		95,915		-		_
Canadian equities		302,137		302,137		-		_
Canadian equities mutual funds		159,532		159,532		-		-
United States equities mutual funds		88,220		88,220		-		-
International equities mutual funds		407,462		334,614		72,848		-
Real estate		35,109		-		-		35,109
Private equity		382,649		-		-		382,649
Other	_	27,163		-	_	27,163	_	
Total endowment investments recorded at fair value	_	1,536,673	-	1,018,904		100,011	_	417,758
Operating investments:								
Short-term investments		-		-		-		-
Fixed income								
Government		496,427		496,427		-		-
Mutual funds		1,007		-		-		1,007
Canadian equities		2,094		2,094		-		-
United States equities		-		-		-		-
Private equity	_	12,180		-	_	<u>-</u>	_	12,180
Total operating investments recorded at fair value	_	511,708		498,521	_		=	13,187
Total	\$_	2,048,381	\$_	1,517,425	\$_	100,011	\$ _	430,945

The following table reconciles the changes in fair value of financial instruments classified as level 3 during the year.

	-	March 31 2018	_	March 31 2017
Balance, beginning of year	\$	430,945	\$	294,767
Unrealized gains		4,748		15,784
Purchases		121,096		157,865
Dispositions	_	(52,954)		(37,471)
Balance, end of year	\$	503,835	\$	430,945



(all tabular amounts are in thousands of dollars)

5 Investments in Government Business Enterprises

Two entities are accounted for in the University's consolidated financial statements using the modified equity method of accounting for government business enterprises (Note 2(c)(ii)).

Financial information in respect of these entities is disclosed below.

		UBC Properties Investments Ltd.			Great Northern Way Campus Tru			
Consolidated Statement of Financial Position:	_	March 31 2018		March 31 2017		March 31 2018		March 31 2017
Financial assets Liabilities	\$_	86,103 504,280	\$	73,076 423,909	\$	49,387 32,251	\$_	78,841 13,857
Net assets (liabilities)		(418,177)		(350,833)		17,136		64,984
Non-financial assets	_	447,851	_	390,627	_	20,318	_	13,321
Accumulated surplus Adjustment for Infrastructure Impact Charges (IIC's) and contributions	\$	29,674 (12,676)	\$	39,794 (13,052)	\$	37,454 -	\$	78,305 -
Adjusted accumulated surplus	\$	16,998	\$	26,742	\$	37,454	\$	78,305
UBC's proportionate share	\$	16,998	\$	26,742	\$	9,364	\$	19,576
Consolidated Statement of Operations:								
Revenue	\$	88,926	\$	111,431	\$	38,969	\$	28,529
Expenses		8,380		8,258		23,306		14,620
Surplus for the year	_	80,546		103,173		15,663	_	13,909
Adjustment to defer land sales		(71,051)		(95,946))	-		-
Adjustment for IIC's		352		328		-		-
Adjusted accumulated surplus	\$	9,847	\$	7,555	\$	15,663	\$	13,909
UBC's proportionate share	\$	9,847	\$	7,555	\$	3,916	\$	3,477

- (a) UBC Properties Investments Ltd. recognizes revenue from sales of 99-year leases in its income statement in the year that the transaction is completed. The University defers these revenues in the Consolidated Statement Financial Position and amortizes the balance to the Consolidated Statement of Operations and Accumulated Surplus over the duration of the lease (Note 11).
- (b) During the year, the following significant related party transactions occurred:

UBC Properties Trust invoiced the University \$4 million (2017 – \$4.1 million) for project management fees.

UBC Properties Trust issued promissory notes in favour of the University amounting to \$2.6 million (March 31, 2017 - \$33.3 million). The University charged UBC Properties Trust interest in the amount of \$0.3 million (2017 - \$0.2 million).

The University collected \$1.1 million from UBC Properties Trust (2017 - \$18.4 million) for infrastructure impact charges. These charges have been eliminated in the consolidated financial statements.



(all tabular amounts are in thousands of dollars)

5 Investments in Government Business Enterprises (continued)

(c) During the year, the University received a distribution from the Great Northern Way Campus Trust of \$8 million relating to the sale of one of the Trust's land lots.

6 Investments in Government Partnerships

UBC provides contributions to fund the operations of TRIUMF, WCUMSS, and CDRD Ventures Inc. Their financial results are proportionately consolidated with those of UBC based upon UBC's share of their total contributions.

The amounts included in these consolidated financial statements are as follows:

	I	RIUMF	<u>WC</u>	UMSS	CDRD Ve	ntures Inc.
Consolidated Statement of Financial Position:	March 31	March 31	March 31	March 31	March 31	March 31
	2018	2017	2018	2017	2018	2017
Financial assets	\$ 49,175	\$ 47,734	\$ 1,098	\$ 2,101	\$ 16,456	\$ 16,022
Liabilities	49,930	45,690	1,847	3,696	8,146	7,747
Net assets (liabilities)	(755)	2,044	(749)	(1,595)	8,310	8,275
Non-financial assets	25,418	20,898	7,513	5,917	12	27
Accumulated surplus UBC's proportionate share	\$ <u>24,663</u>	\$ <u>22,942</u>	\$ 6,764	\$ 4,322	\$ 8,322	\$ 8,302
	\$ 1,897	\$ 1,911	\$ 1,353	\$ 864	\$ 2,774	\$ 2,740
Consolidated Statement of Operations:	Ψ	Ψ	Ψ	Ф <u> </u>	Ψ	Ψ 2,740
Revenue	\$ 77,086	\$ 72,453	\$ 6,505	\$ 3,564	\$ 844	\$ 15,046
Expenses	75,364	70,762	4,062	3,252	824	672
Surplus for the year	\$ 1,722	\$ 1,691	\$ 2,443	\$ 312	\$ 20	\$ 14,374
UBC's proportionate share	\$ 132	\$ 141	\$ 489	\$62_	\$7	\$ 4,743

TRIUMF expenses all capital assets in its income statement as acquired; the University capitalizes the capital assets and amortizes them over the useful lives. TRIUMF recognizes revenue in the year it is received, whereas the University follows the deferral method of accounting for contributions.



(all tabular amounts are in thousands of dollars)

7 Accounts Payable and Accrued Liabilities

	_	March 31 2018	_	March 31 2017
Accounts payable and accrued liabilities	\$	260,959	\$	242,777
Salaries and benefits payable		18,584		35,286
Accrued vacation pay		8,109		7,638
Amounts payable to government organizations		9,631		5,575
	\$	297,283	\$	291,276

Included in accounts payable and accrued liabilities at March 31, 2018 is a balance of \$29.2 million owing to UBC Properties Investments Ltd. (March 31, 2017 - \$36.9 million).

8 Employee Future Benefits

(a) Contributions to Pension Plans

University contributions made to each of the pension plans were:

	_	March 31 2018	_	March 31 2017
Faculty Pension Plan	\$	42,580	\$	43,306
Staff Pension Plan		43,482		39,412
Supplemental Arrangement		4,571		4,147
	\$	90,633	\$	86,865

(b) Accumulated Sick Leave Benefit and Income Replacement Plan (IRP)/Disability Benefit Plan (DBP)

The accrued sick leave benefit and accrued IRP and DBP obligations as at March 31, 2018 are based on actuarial valuations prepared as of March 31, 2016 and 2018, respectively. The accrued benefit obligations are calculated as follows:

	Sick leave	IRP and DBP	March 31 2018	March 31 2017
Balance, beginning of year Current service and interest cost Benefits paid Actuarial gain	\$ 2,361 880 (951)	\$ 9,733 1,702 (1,488) (3,250)	\$ 12,094 2,582 (2,439) (3,250)	\$ 11,960 2,497 (2,363)
Balance, end of year	\$ 2,290	\$ 6,697	\$ 8,987	\$ 12,094



(all tabular amounts are in thousands of dollars)

8 Employee Future Benefits (continued)

(b) Accumulated Sick Leave Benefit and IRP/DBP (continued)

Components of net benefit expense	2018	2017
Service cost Interest cost	\$ 2,274 308	\$ 2,194 303
Net benefit expense	\$ 2,582	\$ 2,497

Actuarial assumptions used to determine the University's accrued sick leave benefit obligation are as follows:

	March 31 2018	March 31 2017
Discount rate Expected wage and salary increases	1.90% 2.00%	1.90% 2.00%

Actuarial assumptions used to determine the University's accrued income replacement benefit obligation are as follows:

	March 31 2018	March 31 2017
Discount rate	3.50%	2.45%
Expected future inflation rate	2.00%	2.00%
Expected wage and salary increases	2.00%	3.00%



(all tabular amounts are in thousands of dollars)

9 <u>Deferred Contributions</u>

Deferred contributions represent unspent externally restricted grants, donations, contributions and endowment investment income.

	 March 31 2018	_	March 31 2017
Research	\$ 333,348	\$	286,921
Capital	25,781		39,488
Trust	136,472		103,757
Endowment	620,205		536,114
Balance, end of year	\$ 1,115,806	\$	966,280

Changes in deferred contributions are as follows:

	March 31, 2018						
	Research	Capital	Trust	Endo	wment		Total
Balance, beginning of year Grants, contributions, donations	\$ 286,921	\$ 39,488	\$ 103,757	\$ 5	36,114	\$	966,280
and endowment income Transferred to deferred capital	473,484	83,595	238,463	1:	28,545		924,087
contributions (Note 10)	(31,580)	(96,286)	-		-		(127,866)
Recognized to revenue	(395,477)	(1,016)	(205,748)	(4	44,454)		(646,695)
Balance, end of year	\$ 333,348	\$ 25,781	\$ 136,472	\$ 6	20,205	\$	1,115,806

	March 31, 2017						
	Research	Capital	Trust	Endowment	Total		
Balance, beginning of year Grants, contributions, donations	\$ 262,155	\$ 32,333	\$ 109,312	\$ 414,113	\$ 817,913		
and endowment income Transferred to deferred capital	451,545	98,647	181,745	160,285	892,222		
contributions (Note 10)	(43,059)	(85,492)	-	-	(128,551)		
Recognized to revenue	(383,720)	(6,000)	(187,300)	(38,284)	(615,304)		
Balance, end of year	\$ 286,921	\$ 39,488	\$ 103,757	\$ 536,114	\$ 966,280		



(all tabular amounts are in thousands of dollars)

10 Deferred Capital Contributions

Contributions that are restricted for capital and have been spent on capital are recorded as deferred capital contributions. Contributions that are restricted for capital but have not yet been spent are recorded as deferred contributions until such time that the amounts are spent on tangible capital assets. Amounts are recognized into revenue as the liability is extinguished over the useful life of the related tangible capital asset.

Changes in the deferred capital contributions balance are as follows:

	_	March 31 2018	-	March 31 2017
Balance, beginning of year	\$	1,464,720	\$	1,413,581
Grants, contributions and donations spent (Note 9)		127,866		128,551
Current year amortization		(81,848)	_	(77,412)
Balance, end of year	\$	1,510,738	\$_	1,464,720

11 Deferred Land Lease Revenue

	Balance at March 31 2017 Additions			Additions		Recognized to Revenue		Balance at March 31 2018	
Deferred land lease revenue, gross Accumulated amortization of deferred	\$	732,241	\$	75,833	\$	-	\$	808,074	
land lease revenue		(41,757)		-		(8,040)		(49,797)	
Deferred land lease revenue, net	\$	690,484	\$	75,833	\$	(8,040)	\$	758,277	

	Balance at March 31 2016		,	Additions		Recognized to Revenue	Balance at March 31 2017		
Deferred land lease revenue, gross Accumulated amortization of deferred	\$	614,654	\$	117,587	\$	-	\$	732,241	
land lease revenue	\$	(35,076)	Φ.	117 507	φ	(6,681)	\$	(41,757)	
Deferred land lease revenue, net	Φ	579,578	Ф	117,587	\$	(6,681)	Φ	690,484	



CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED MARCH 31, 2018

(all tabular amounts are in thousands of dollars)

12 Debt

Debt is measured at amortized cost as follows:

Maturity Date	Interest Rate	_	March 31 2018	-	March 31 2017
2031	6.65%	\$	126,710	\$	126,662
2035	4.82%		125,520		125,500
2018 to 2023	6.13% to 7.88%		3,111		4,043
2037	4.70%		126,626		126,624
2020	3.39%	_	228	<u>-</u>	243
			382,195 (26,960)		383,072 (22,671)
		\$	355,235	\$	360,401
r the next five ye	ears and therea	fter a	re as follows:		
				\$	856 648 749 596 433 375.000
	2031 2035 2018 to 2023 2037 2020	Date Rate 2031 6.65% 2035 4.82% 2018 to 2023 to 7.88% 2037 4.70% 2020 3.39%	Date Rate 2031 6.65% \$ 2035 4.82% 2018 6.13% to 2023 to 7.88% 2037 4.70% 2020 3.39%	Date Rate 2018 2031 6.65% \$ 126,710 2035 4.82% 125,520 2018 6.13% 3,111 to 2023 to 7.88% 126,626 2020 3.39% 228 382,195 (26,960) \$ 355,235	Date Rate 2018 2031 6.65% \$ 126,710 \$ 2035 4.82% 125,520 2018 6.13% 3,111 \$ 2023 to 7.88% 126,626 2020 3.39% 228 382,195 (26,960) \$ 355,235 \$ 100 <t< td=""></t<>

2013	Ψ	030
2020		648
2021		749
2022		596
2023		433
Thereafter		375,000
	\$	378,282

Interest expense for the year on outstanding debt is \$20.9 million (2017 - \$20.9 million), which is recorded in the Consolidated Statement of Operations and Accumulated Surplus.

In addition to principal repayments, sinking fund payments are made into government invested funds, to be applied against repayment of provincial debentures on maturity. The market value of sinking fund investments as at March 31, 2018 is \$27.0 million (Note 4a) and is invested in government and corporate bonds. The University will make sinking fund payments over the next five years and thereafter as follows:

2019	\$ 2,006
2020	2,006
2021	2,006
2022	2,006
2023	2,006
Thereafter	30,086
	\$ 40,116



13	Tangible	Capital	Assets
----	-----------------	---------	---------------

Cost	-	Balance at March 31 2017	 Additions Transfers)	D	isposals	Balance at March 31 2018
Land	\$	19,622 230,941	\$ 1,834 13.017	\$	- 295	\$ 21,456 243,663
Site improvements Buildings and renovations		3,646,051	307,252		6,494	3,946,809
Assets under construction		196,683	(101,296)		- 70 FFO	95,387
Furnishings, equipment and systems Library books		603,527 140,764	87,667 15,892		78,559 11,554	612,635 145,102
Total	\$	4,837,588	\$ 324,366	\$	96,902	\$ 5,065,052

Accumulated Amortization	-	Balance at March 31 2017	D	Disposals	Amo	ortization	Balance at March 31 2018
Land Site improvements Buildings and renovations	\$	39,636 1,164,084	\$	- 295 6,494	\$	5,647 95,119	\$ - 44,988 1,252,709
Assets under construction Furnishings, equipment and systems Library books		319,674 65,106		- 78,559 11,554		- 82,662 14,292	323,777 67,844
Total	\$	1,588,500	\$	96,902	\$	197,720	\$ 1,689,318

	Net book value March 31 2018
Land	\$ 21,456
Site improvements	198,675
Buildings and renovations	2,694,100
Assets under construction	95,387
Furnishings, equipment and systems	288,858
Library books	77,258
Total	\$ 3,375,734



Okanagan Senate Docket Page 75 of 180

CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED MARCH 31, 2018 (all tabular amounts are in thousands of dollars)

13 Tangible Capital Assets (continued)

Cost	E	Balance at March 31 2016	 Additions Fransfers)	D	isposals	Balance at March 31 2017
Land	\$	19,622	\$ -	\$	-	\$ 19,622
Site improvements		219,269	11,941		269	230,941
Buildings and renovations		3,432,301	216,717		2,967	3,646,051
Assets under construction		183,210	13,473		-	196,683
Furnishings, equipment and systems		605,360	73,381		75,214	603,527
Library books		135,811	18,488		13,535	140,764
Total	\$	4,595,573	\$ 334,000	\$	91,985	\$ 4,837,588

Accumulated Amortization	-	Balance at March 31 2016	D	isposals	Amo	ortization	Balance at March 31 2017
Land	\$	-	\$	-	\$	-	\$ -
Site improvements		34,559		269		5,346	39,636
Buildings and renovations		1,082,005		2,967		85,046	1,164,084
Assets under construction		-		-		-	-
Furnishings, equipment and systems		313,963		75,214		80,925	319,674
Library books		64,812		13,535		13,829	65,106
Total	\$	1,495,339	\$	91,985	\$	185,146	\$ 1,588,500

	Net book value March 31 2017
	2017
Land	\$ 19,622
Site improvements	191,305
Buildings and renovations	2,481,967
Assets under construction	196,683
Furnishings, equipment and systems	283,853
Library books	75,658
Total	\$ 3,249,088



CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED MARCH 31, 2018

(all tabular amounts are in thousands of dollars)

13 Tangible Capital Assets (continued)

(a) Assets Under Construction

As at March 31, 2018, assets under construction having a value of \$95.4 million (March 31, 2017 - \$196.7 million) have not been amortized. Amortization of these assets will commence when the assets are put into service.

(b) Write-Down of Tangible Capital Assets

Write-downs of tangible capital assets during the year were nil (2017 - nil).

14 Financial Risk Management

The University has exposure to the following risks from its use of financial instruments: interest rate risk, liquidity risk, credit risk and foreign exchange risk.

The Board of Governors ensures that the University has identified its major risks and ensures that management monitors and controls them.

(a) Interest Rate Risk

The University is exposed to interest rate risk on fixed income investments held; the risk arises from fluctuations in interest rates and the degree of volatility of these rates. The University is not at risk for changes in interest rates on its long-term debt obligations as all borrowings are at fixed rates of interest.

(b) Liquidity Risk

The University is exposed to liquidity risk which may arise from the possibility that the University is not able to meet its financial obligations as they become due, or can only do so at excessive costs. The University establishes budgets and cash flow projections to ensure it has the necessary funds, including access to a revolving line of credit to fulfill its obligations when due.

(c) Credit Risk

The University is exposed to credit risk if a counterparty to a financial instrument fails to meet its obligations. The University accounts for a specific bad debt provision when management considers that the expected recovery is less than the account receivable.

(d) Foreign Exchange Risk

The University is exposed to foreign exchange risk on investments held in foreign currencies and may use foreign currency swaps to mitigate this risk.



CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED MARCH 31, 2018

(all tabular amounts are in thousands of dollars)

15 Government Grants and Contracts

	March 31 2018	March 31 2017
Province of British Columbia		
Core Academic Funding \$	613,902	\$ 598,893
Post Graduate Medical Education Program	135,048	126,520
Other funding	35,830	55,457
Total Province of British Columbia	784,780	780,870
Government of Canada	273,439	254,293
Other governments	18,877	23,789
\$ <u></u>	1,077,096	\$ 1,058,952

During the year, the University received restricted and unrestricted funding from the Province of British Columbia in the amount of \$842 million (2017 - \$792.3 million). \$784.8 million has been recognized as revenue from funding received in the current year and prior years (2017 - \$780.9 million). Unspent funding represents restricted contributions and is deferred in the Consolidated Statement of Financial Position.

16 Contractual Rights

The University has entered into contracts or agreements in the normal course of operations that it expects will result in the realization of assets and revenues in future fiscal years. UBC is the recipient of research grants from various federal, provincial, and municipal funding agencies. These funding agreements do not abnormally impact the University's financial position and do not guarantee the University the right to future funding.

17 Contractual Obligations and Contingent Liabilities

Contractual obligations and contingent liabilities are as follows:

(a) Capital Projects

At March 31, 2018, outstanding commitments totalled \$20.2 million (March 31, 2017 - \$134.9 million) for capital projects. These commitments are payable in subsequent years, and are funded by provincial contributions, private donations and earnings from sales and services.

(b) Litigation

The University is involved from time to time in litigation, which arises in the normal course of operations. Liabilities on any litigation are recognized in the consolidated financial statements when the outcome becomes reasonably determinable. In management's judgement, there is no material negative exposure at this time from existing litigations.

(c) Derivative Financial Instruments

At March 31, 2018, the University had outstanding forward currency contracts with notional values of \$298.3 million (2017 - \$209.2 million) whose settlements extend to May 4, 2018. The unrealized loss at March 31, 2018 was \$2.5 million (2017 - loss of \$1.6 million) and has been reflected in the Statement of Remeasurement and in the fair value of investments.



CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED MARCH 31, 2018

(all tabular amounts are in thousands of dollars)

17 Contractual Obligations and Contingent Liabilities (continued)

(d) Self Insurance

Effective January 1, 2013, the University became a member of the University, College and Institute Protection Program (UCIPP), which is an actuarially valuated program of self-insurance for the Province of British Columbia that has been in place since 1987. It is one of several self-insurance programs operated within the Insurance and Risk Management Account (IRMA), which is a special account established under the Financial Administration Act, controlled by the Risk Management Branch of the Ministry of Finance. Annually, an independent actuarial firm reviews the claims history, funding levels and balances in the various programs making up IRMA to ensure that it is maintained at a level sufficient to pay both known claims and incurred, but not reported, losses.

(e) Funding Commitments

Under its endowment investment strategy, the University has outstanding commitments to fund infrastructure, private debt, private equity and real estate investments totalling approximately \$3.6 million (March 31, 2017 - \$18.9 million); \$54.6 million (March 31, 2017 - nil); \$137.7 million (March 31, 2017 - \$79.0 million); and \$48.5 million (March 31, 2017 - \$68.4 million), respectively. The University has no outstanding commitments to previous hedge fund investments (March 31, 2017 - nil).

(f) Letter of Credit

The University has a letter of credit facility of CAD \$26.3 million available as of March 31, 2018 (March 31, 2017 - \$1.3 million). This letter of credit is provided as security to BC Hydro for electrical infrastructure upgrade work to be completed by October 2020. The University does not expect to draw on the letter of credit as BC Hydro is expected to recover its costs via increased electrical billings.

18 Related Party Transactions

The University is related through common control to all Province of British Columbia ministries, agencies, school districts, health authorities, colleges, universities, and crown corporations. Transactions with these related parties, unless disclosed otherwise, are considered to be in the normal course of operations and are recorded at their exchange amounts, which is the amount of consideration established and agreed to between the University and the related parties.



CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED MARCH 31, 2018

(all tabular amounts are in thousands of dollars)

19 Expenses by Object

The following is a summary of expenses by object:

за под	 March 31 2018	_	March 31 2017
Salaries	\$ 1,267,799	\$	1,203,356
Employee benefits	195,107		187,798
Supplies and sundries	240,110		229,555
Amortization	197,720		185,146
Cost of goods sold	45,570		38,120
Scholarships, fellowships and bursaries	130,935		115,514
Travel and field trips	55,028		51,847
Professional and consulting fees	113,862		100,346
Grants and reimbursements to other agencies	135,691		125,942
Utilities	38,317		37,939
Interest on long-term debt	20,854		20,980
	\$ 2,440,993	\$	2,296,543

20 Budget Figures

A reconciliation of the budget approved by the Board and amounts disclosed in these statements is as follows:

	2018 Approved Budget		Re-categorization of Budget		2018 Budget
Revenues		-		•	
Government grants and contracts	\$ 1,083,728	\$	-	\$	1,083,728
Tuition and student fees	680,854		-		680,854
Sales and services	367,276		-		367,276
Non-government grants, contracts and donations	175,933		-		175,933
Investment income	82,239		-		82,239
Income from government business enterprises	2,382		-		2,382
Revenue recognized from deferred capital contributions	85,074		-		85,074
•	2,477,486	-	-		2,477,486
Expenses		-			
Learning	1,133,806		92,908		1,226,714
Research	432,254		41,139		473,393
Facilities	340,832		(39,625)		301,207
Students	360,672		(57,186)		303,486
Community engagement	57,323		636		57,959
Administration	119,201	_	(37,872)	_	81,329
	2,444,088	-	-		2,444,088
Annual surplus from operations	33,398		-		33,398
External endowment donations	30,000		-		30,000
Annual surplus	\$ 63,398	\$	-	\$	63,398



CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED MARCH 31, 2018

(all tabular amounts are in thousands of dollars)

21 Grants and Reimbursements to Other Agencies

During the year, the University distributed research and other funds to agencies totalling \$135.7 million (2017 – \$125.9 million). These funds were distributed under agreements with granting agencies, whereby the University is the administrative head and a portion of the research is undertaken at other agencies.

Reimbursements of \$98.4 million (2017 - \$92.9 million) were made to BC health authorities for payments made on behalf of the University for the postgraduate medical education program.

22 Comparative Information

Certain comparative figures have been reclassified in order to provide presentational consistency with the current year.





THE UNIVERSITY OF BRITISH COLUMBIA

Office of the Senate
University Centre | UNC 322
3333 University Way
Kelowna, BC Canada V1V 1V7

Phone 250 807 9619 Fax 250 807 8007 www.senate.ubc.ca/okanagan

25 April 2019

To: Okanagan Senate

From: Curriculum Committee and Admissions and Awards Committee

Re: Joint Report Curriculum and Admissions Proposals (approval)

- Ph.D. in Computer Science (new program)

- Ph.D. in Nursing (new program)

The Curriculum Committee and the Admissions & Awards Committee have reviewed the material forwarded to it by the Faculties and encloses those proposals it deems ready for approval.

Therefore, the following is recommended to Senate:

Motion:

That Senate approve the Ph.D. in Computer Science program and related new courses brought forward from the Faculty of Arts and Sciences and the Ph.D. in Nursing program and related new courses brought forward by the Faculty of Health and Social Development

- a. From the Faculty of Arts and Sciences
 - i. Ph.D. in Computer Science (new program)
 - ii. COSC 649
 - iii. COSC 690
- b. Faculty of Health and Social Development
 - i. Ph.D. in Nursing
 - ii. NRSG 554
 - iii. NRSG 580
 - iv. NRSG 581
 - v. NRSG 601
 - vi. NRSG 699

For the Committees,

Dr. Peter Arthur Chair, Curriculum Committee

Doctor of Philosophy in Computer Science (Ph.D.)

I. K. Barber School of Arts and Sciences

University of British Columbia – Okanagan (UBCO)

Table of Contents

1	Exec	utive Summary	2
2	Over	view	2
	2.1	Introduction	2
	2.2	Credential	3
	2.3	Location	3
	2.4	Need for the Program	3
	2.5	Faculty Offering Program	3
	2.6	Program Start Date	3
	2.7	Program Completion Time	4
	2.8	Objectives and Program Learning Outcomes	4
	2.9	Contributions to UBC's Mandate and Strategic Plan	5
	2.10	Student Interest and Enrolment Expectations	6
	2.11	Delivery Methods	
	2.12	Linked Learning Outcomes and Curriculum Design: assessment plan	7
	2.13	Program Strengths	8
	2.14	Related Programs at UBC and other BC Post-Secondary Institutions	8
	2.15	Institutional Contacts / Proponents	8
3	Prog	ram Description and Specification	8
	3.1	Admission Requirements	9
	3.2	Program Requirements	.0
	3.3	Resources	.1
Α	ppendix	A: Computer Science Job Market	.3
Α	ppendix	B: UBCV Ph.D. Career Outcomes	.4
Α	ppendix	C: Curriculum Mapping 1	.5

1 Executive Summary

The Department of Computer Science, Mathematics, Physics and Statistics (CMPS) at the University of British Columbia on the Okanagan campus proposes to offer a degree program for Doctor of Philosophy in Computer Science (Ph.D.). It is an evolution of the training in computer science that has been offered within the interdisciplinary graduate studies (IGS) Ph.D. program. It allows students in our M.Sc. in Computer Science to further continue their studies toward a career in academia or industry. It should be noted that UBC already offers a degree program in Computer Science (Ph.D.) on its Vancouver campus.

Computer Science at UBCO has been growing steadily with increased enrolments in our undergraduate programs and increased interest in our M.Sc. program. The department has just hired three assistant professors with Ph.Ds. in computer science to support new programs in data science and media studies. It is actively involved in delivering data science programs (B.Sc. major and minor, master of data science) in partnership with statistics, and the bachelor of media studies in partnership with the department of creative studies. Additional hiring in computer science is planned to meet the ministry approved new FTEs target. With 12 research-stream faculty members (and four more new hires expected), the department has reached the critical mass necessary to offer a Ph.D. program. Such a program will fill a gap in our degree offerings and is a critical milestone in meeting UBC research-intensive mandate.

Computer Science graduate programs are in very high demand, as they train students for employment in the fast growing fields of software development, information technology, and data science. The proposed Ph.D. in Computer Science program will attract graduate students in these high-demand fields and offer them high-quality education that will prepare them well for a career in academia or industry.

2 Overview

2.1 Introduction

UBCO's CMPS department has offered graduate degrees first in the Interdisciplinary Graduate Studies (IGS) program (M.Sc. and Ph.D.), and most recently, the M.Sc. in Computer Science. Until now, students interested in a Ph.D. program have been limited to the individualized IGS program for interdisciplinary research, or the mathematics Ph.D. program for more theoretical research.

The proposed program, **Ph.D. in Computer Science**, will provide a disciplinary degree in a fast growing field. Ph.D. students may focus their research in the following areas:

- Artificial Intelligence: machine learning, reasoning and algorithmic decision making, intelligent user interfaces, computer vision.
- Network Science: graph theory, network analytics, social network analysis, and applications in social media, computational biology, and brain science.
- Data analytics, data science, big data: business intelligence, data integration, data management, data mining, databases, health analytics, health informatics, learning analytics.

- Human-centered technologies: human computer interaction (HCI), visual, haptic and multimodal interfaces, visual analytics, immersive analytics.
- Optimization, scientific Computing: numerical methods and software, modeling, visualization.
- Software Engineering: development tools, software engineering analytics.

2.2 Credential

Doctor of Philosophy in Computer Science

2.3 Location

UBC Okanagan

2.4 Need for the Program

The program will train a small number of highly-qualified students in computer science. Besides research or teaching positions at universities or colleges, graduates will find many opportunities in industry. They would be qualified for the positions listed in Appendix A, with solid potential to advance to more senior-level positions. The program will provide UBCO students the opportunity to continue their graduate studies in the Okanagan¹.

The program will also intensify research activities in computer science and better support faculty members' research, be it through grant applications or industry connections. A Ph.D. program is one of the most impactful programs a university can have to support research. It will support the entrepreneurship culture of the Okanagan (while students from the Okanagan constitutes around 30% of the campus population, around 50% of our graduates stay in the Okanagan²), and further ease the delivery of industry-sponsored grants.

The program will also have an indirect impact on existing computer science programs at the undergraduate and M.Sc. level. By offering a complete set of computer science programs (B.Sc., M.Sc., Ph.D.), the campus will increase the interest of students seeking universities with a widerange of degrees to maximize their opportunities.

2.5 Faculty Offering Program

The Department of Computer Science, Mathematics, Physics, and Statistics (CMPS) within the I. K. Barber School of Arts & Sciences (Faculty of Arts and Sciences) on the Okanagan campus will offer the program.

2.6 Program Start Date

The program will be first offered with a September 2020 start date.

¹The student profiled on https://www.grad.ubc.ca/prospective-students/graduate-degree-programs/phd-computer-science as of 2018-05-17 is a graduate from UBCO computer science; the proposed program would provide research opportunities for such students at UBCO.

² OPAIR data partly based on the Baccalaureate Graduates Survey (BGS) http://outcomes.bcstats.gov.bc.ca/Publications/BGS Publications/BGSReportsByDiscipline.aspx

2.7 Program Completion Time

The anticipated completion time for the program is four years of full-time academic study.

2.8 Objectives and Program Learning Outcomes

The primary objectives of the proposed program are:

- To provide students with the most advanced research opportunities and train them in cutting-edge techniques to support the next generation of professionals for subsequent employment within education, government, and industrial sectors.
- To fill a gap in our program offerings for students who wish to pursue a career in academia or industry.
- To support research-stream faculty members in their research.

Graduates of the Ph.D. in Computer Science program will be able to

- 1. [critical thinking/ knowledge creation] apply problem solving, reasoning, and technical skills to solve problems with minimal guidance;
- 2. [communication] communicate concepts and results to a technical audience in the form of conference papers, journal papers, and oral presentations;
- 3. [knowledge dissemination] teach university-level computer science concepts and techniques;
- [computing as a tool] implement programs using modern programming languages including selecting the most appropriate platform, evaluating the implementation efficiency, and listing performance bottlenecks;
- 5. [breadth] demonstrate a solid foundation of core Computer Science: algorithms, data structures, databases, scientific computing, software engineering;
- 6. [scientific method] conduct independent and innovative research that advances scientific knowledge within their field of expertise; and
- 7. [continuous learning] analyze current trends in computer science, and anticipate upcoming technological challenges.

2.9 Contributions to UBC's Mandate and Strategic Plan

By its very nature, the program supports UBC's Next Century strategic plan³, in particular

- People and places: Strategy 3: Thriving Communities (Support the ongoing development of sustainable, healthy and, connected campuses and communities), especially through the department track record in industry-sponsored grants.
- Research excellence: Strategy 8: Student Research (broaden access to, and enhance) student research experiences), Strategy 10: Research Culture (Foster a strong and diverse research culture that embraces the highest standards of integrity, collegiality and service).
- Transformative learning: Strategy 13: Practical Learning (Expand experiential, workintegrated and extended learning opportunities for students, faculty, staff and alumni), Strategy 15: Student Experience (Strengthen undergraduate and graduate student communities and experience); the intrinsic mentoring nature of a Ph.D. program that focuses on a one-to-one learning environment is the most effective learning method. The research labs fosters effective students-to-students interactions while the mandatory minimum funding allows students to focus exclusively on their research.
- Local and global engagement: Strategy 16: Public Relevance. (Deepen the relevance and public impact of UBC research and education).

The program also supports UBCO's Aspire strategic plan⁴, namely:

- Transformative student learning: expanding experiential learning opportunities... through community partnerships e.g., MITACS accelerate funding for graduate students.
- Research excellence: ...make research more accessible, identify research with local and global impact (creating innovation hubs, facilitate more robust graduate programming and research opportunities).
- Community engagement: creating innovation hubs.
- Place: identify strategies to maintain a distinctive learning environment, strengthen cultural diversity (most of our graduate students are international⁵), strategies to support the development of this campus.

https://strategicplan.ubc.ca/wp-content/uploads/2018/04/2018 UBC Strategic Plan Full-20180425.pdf

⁴ https://aspire.ok.ubc.ca/

⁵ In the M.Sc. in computer science, 14/20 students have been international while they were 15/16 in the M.Sc. in Interdisciplinary Studies, Optimization theme.

2.10 Student Interest and Enrolment Expectations

The number of applicants to the IGS M.Sc. oscillated between 10 and 30 until the M.Sc. in Computer Science was launched in 2017. The M.Sc. in computer science attracted 35 applications in 2017, 140 in 2018, and around 200 in 2019. Like at the M.Sc. level, it is expected the demand for a Ph.D. in computer science will be much stronger than for a Ph.D. in IGS. Demand will be further boosted by the arrival of new faculty members who provide both more diverse areas of research and increased capacity to supervise graduate students.

With 12 research faculty members, we expect the program to ramp up to 5 students quickly, with the potential to graduate 6-12 students per year after 5-7 years.

Student interest is influenced by the growing interest in computer science in general. The undergraduate course enrolment in Computer Science has grown quadratically and reflects growing overall demand. The 10-year (resp. 5-years, 3-years, 1-year) overall growth is 20% (resp. 22%, 23%, 24%). The growth of the undergraduate program has caused a major issue with finding qualified TAs. The Ph.D. program will allow us to recruit more and better qualified graduate students and fund them as GTAs. This will improve the educational experience for undergraduate students while providing teaching opportunities for graduate students.

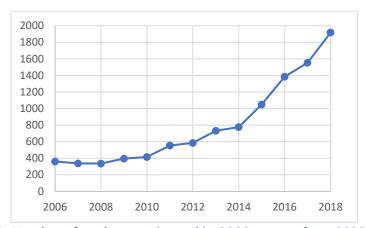


Figure 1: Number of students registered in COSC courses from 2006 to 2018

Table 1: Number of students registered in COSC courses from 2006 to 2018

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Regist.	362	338	337	397	415	555	585	733	776	1050	1385	1553	1918
Growth		-7%	0%	18%	5%	34%	5%	25%	6%	35%	32%	12%	24%

Enrolment data for the program at UBCV is summarized in the table below⁶. Although the demand for Ph.D. programs is mostly driven by the reputation of research faculty members, the table shows there is unmet demand, e.g., in 2017 there is a significant difference between the number of applications received and total enrolment.

	2017	2016	2015	2014	2013
Applications	151	142	129	111	131
Offers	15	15	11	14	11
New registrations	13	12	6	9	6
Total enrolment	76	78	76	83	81

Alumni have found positions in higher education (research-intensive universities) and industry (research scientist/engineer, software engineer, chief technology officer, product manager, software development engineer, data scientist at Google, Microsoft, Amazon, Intel) ⁷.

2.11 Delivery Methods

The program is delivered in a combination of classroom instruction, a comprehensive examination, and a defense of a dissertation in accordance with the College of Graduate Studies standard practice.

2.12 Linked Learning Outcomes and Curriculum Design: assessment plan

Learning Objective	Assessment
Knowledge creation (critical thinking, problem solving)	Originality of research contributions (articles, conferences)
Communication	Research proficiency oral evaluation, thesis proposal oral
(oral)	examination, dissertation defense; conference presentations
Communication	Research proficiency written report, thesis proposal, dissertation;
(written)	article proceedings, journal articles
Knowledge dissemination	Teaching experience as TA, sessional; seminars, publications
Tool mastery: computing	Coursework/projects, prototype research code to validate article contributions
Breadth	Comprehensive requirements on core foundation
Research	Research plan (innovative ideas, impact, student contribution)
Continuous learning	Bibliography for dissertation, conference attendance

⁶ https://www.grad.ubc.ca/prospective-students/graduate-degree-programs/phd-computer-science

7

⁷ https://www.grad.ubc.ca/prospective-students/graduate-degree-programs/phd-computer-science

The curriculum is designed to prepare students for potential sectors of employment in academia or industry including as programmers, software developers, software engineers, business analysts, data scientists, big data developers, or data engineers.

While work experience/work place term is not mandatory in the program, industry-sponsored grants (MITACS Accelerate, NSERC Engage, NSERC Collaborative Research and Development) will be available to better prepare students to tackle real-world problems found in industry.

2.13 Program Strengths

The program builds on the increasingly stronger research by department faculty members in a society that depends on software, data, computers, and critical thinking. It leverages the start-up culture of the Okanagan and trains leaders with much needed solid technical expertise. The program will have a direct impact on companies in the Okanagan.

2.14 Related Programs at UBC and other BC Post-Secondary Institutions

UBC Vancouver, the University of Victoria, and Simon Fraser University have offered a Ph.D. in Computer Science for many years. The geographical location justifies creating the program at UBC Okanagan.

2.15 Institutional Contacts / Proponents

Yves Lucet, Department of Computer Science, Mathematics, Physics and Statistics yves.lucet@ubc.ca; 250-807-9505

3 Program Description and Specification

Similarities and Minor Differences to UBC-Vancouver Program

Both programs share the same objectives and are aligned in the same way with the UBC Mandate and Strategic Plan. Similarly, the context, demand, and expected interest for the program is the same. The difference is in the expertise of faculty members on each campus and on minor operational differences. See Appendix C for a curriculum mapping document showing the alignment.

Minimal funding policy⁸

In May 2017, the UBCV Senate approved the establishment of a university-wide minimum funding level for all Ph.D. students. Specifically, all full-time students who begin a UBC Vancouver Ph.D. program in September 2018 or later will be provided with a minimum funding package equal to \$18,000 for each of the first four years of their Ph.D. The funding package may consist of any combination of internal or external awards, teaching-related work, research assistantships, and graduate academic assistantships.

8

⁸ https://www.grad.ubc.ca/awards/minimum-funding-policy-phd-students

Although such a policy is not in place at UBCO, the M.Sc. in computer science program has a mandatory minimal funding of \$17,500⁹ per year for 2 years. Similarly, the proposed Ph.D. program will have a mandatory minimal funding of \$21,000¹⁰ per year for 4 years.

3.1 Admission Requirements

Applicants to the program are admitted as part of the general admission for graduate students¹¹. Admission requirements include a master degree in computer science or a related field. Applicants with a degree not specifically in computer science are expected to have undertaken coursework in computer science, such as the equivalent of a minor in computer science. An overall average of B+ (76% or higher) in the student's graduate course work is normally required.

In exceptional cases, applicants who hold an honours bachelor's degree may be granted direct admission on recommendation of the admitting graduate program and approval of the Dean of the College of Graduate Studies¹². In addition to these requirements, students need to satisfy the following once admitted to stay in the program: pass 12 credits in 500-level coursework with an overall average of at least 85%, pass the research proficiency evaluation, and receive continuous approval and support (including financial) from the dissertation supervisor. All conditions will be lifted no sooner than 12 months, but no later than 18 months, in the program. Should a student fail to satisfy the conditions, they will be required to withdraw from the program, but may be offered the opportunity to transfer into the M.Sc. in Computer Science if they are eligible to do so ¹³.

Other requirements¹⁴ from the College of Graduate Studies apply, e.g., English language proficiency requirements.

Ph.D. Track Program 15

Well-qualified students admitted to the M.Sc. program may transfer to the Ph.D. program following the rules of the College of Graduate Studies.

⁹ The amount matches NSERC Canada Graduate Scholarships

¹⁰ The amount matches NSERC Postgraduate Scholarships-Doctoral Program

¹¹ http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,285,998,1196

¹² http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,285,998,1196

¹³ Admitting directly into the Ph.D. with an honours is already possible for most Ph.D. degrees, e.g., <u>Ph.D. in Mathematics</u>; the present paragraph only clarifies the conditions to satisfy. Allowing such admission at the Ph.D. level is very important to compete with US institutions.

¹⁴ http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,285,998,1196.

¹⁵ https://www.cs.ubc.ca/students/grad/policies/grad-handbook/phd-track-within-msc-program/coursework-phd-track-program, https://www.grad.ubc.ca/faculty-staff/policies-procedures/transfer-masters-doctoral-programs-without-completing-masters

3.2 Program Requirements

The program has four components normally taken in the following order:

- 1. **Research proficiency evaluation:** requires carrying out a small research project, writing a technical report, and defending the results orally in front of the student supervisory committee. At UBCO, this requirement is formalized as passing the course COSC 690 (3) Research Skills (most students are expected to complete COSC 690 in the first 8 months; all students should complete it in the first 12 months). The intent is to quickly detect students who do not meet Ph.D.-level research expectations.
- 2. Comprehensive requirement: assess breadth and ensure students have the background to carry out the research. Following the same format as UBCV CPSC, this requirement will be satisfied by passing 15 credits of breadth requirements and 9 credits of depth requirements. Alternatively, passing a single exam covering the content will be allowed. Upper-level courses and above taken during the bachelor, master or Ph.D. can count toward that requirement, although the supervisor and program coordinator will make sure the comprehensives include enough graduate level courses to meet the learning objectives of the PhD program especially with respect to depth of content and intensity of learning. The rationale to allow students to take courses instead of self-studying and passing an exam is that, in most cases, the comprehensive exam is the final exam of a graduate level course. Taking courses simplifies the process, increases the quality assurance, makes the program easier to deliver, and provides more opportunity, e.g., by allowing UBCV CPSC courses. A generic list of allowed courses will be available on the COSC website, and the program coordinator will approve each change to ensure the program integrity.
- 3. Thesis proposal oral examination: write a thesis proposal and defend it in front of the supervisory committee. This is the standard dissertation prospectus presentation. While a course could also be created for that purpose, it would create unnecessary scheduling constraints since the timeline for such oral examination is very specific to each student, contrary to the research proficiency examination that has to be taken early.

At this point the candidate has advanced to **candidacy.**

4. **Research program completion:** carry out research under the supervisor's guidance, write the dissertation, and pass the defense; this is COSC 649.

Advancement to candidacy requires passing the comprehensive requirement, the research proficiency evaluation, and the thesis proposal oral examination. Students are expected to advance to candidacy within the first 24 months in the program; they will be required to withdraw from the program if they have not advanced within 36 months as per CoGS policies.

3.3 Resources

Human Resources

The following faculty members with experience in research or graduate supervision will support the program.

Name	Rank	Recent Fundin	g Research Expertise
Jeffrey Andrews	Assistant Professor	DG, Engage, Accelerate	Unsupervised machine learning, mixture models, scientific computing
John Braun	Professor	DG, CANSSI	Scientific computing, computational statistics, statistical education
Yong Gao	Professor	DG	Artificial intelligence, network science, algorithms
Donovan Hare	Associate Professor	Applying to DG	Discrete optimization
Warren Hare	Associate Professor	DG, CRD, Engage, Accelerate	Scientific computing, optimization, nonconvex analysis
Mohammad Khalad Hasan	Assistant Professor	Applying to DG	Human-centered technologies, user experience, media studies
Fatemeh Hendijani Fard	Assistant Professor	Applying to DG	Software engineering, data science
Patricia Lasserre	Associate Professor	Accelerate	Human-centered technologies, human-computer interaction, computer vision, computer science education
Ramon Lawrence	Associate Professor	DG	Data management, databases, algorithms, innovative teaching systems
Jason Loeppky	Associate Professor	DG, CRD, Engage	Machine learning, Design and analysis of experiments for physical processes and computer-based simulations
Yves Lucet	Professor	DG, CRD, Engage, Accelerate	Scientific computing, optimization, convex analysis, algorithms, computer science education
Apurva Narayan	Assistant Professor	Applying to DG	Software engineering, data science

Abbreviations: DG (NSERC Discovery Grant), CRD (NSERC Collaborative Research and Development grant), Engage (NSERC Engage grant), Accelerate (MITACS Accelerate grant), CANSSI (Canadian Statistical Sciences Institute).

The following table summarizes specialties (AI: artificial intelligence/machine learning, NS: network science, DS: data analytics/data science/big data, HCT: human-centered technologies, OPT: Optimization/scientific computing, SE: software engineering).

Name	Al	NS	DS	НСТ	OPT	SE	Total
Jeffrey Andrews	0.3		0.3		0.3		1.0
John Braun	0.3		0.3		0.3		1.0
Yong Gao	0.5	0.5					1.0
Donovan Hare		0.5			0.5		1.0
Warren Hare					1.0		1.0
Mohammad Khalad Has	an			1.0			1.0
Fatemeh Hendijani Faro	l		0.5			0.5	1.0
Patricia Lasserre				1.0			1.0
Ramon Lawrence			1.0				1.0
Jason Loeppky	1.0						1.0
Yves Lucet					1.0		1.0
Apurva Narayan	0.3		0.3			0.3	1.0
Total	2.5	1.0	2.5	2.0	3.2	0.8	12.0

In addition to the 12 faculty members above, the department has been approved and is in the process of hiring 2 assistant professors, with a starting date in 2019, bringing the total to 14 active researchers supporting the program. Government funding to further expand the computer science program was granted and a further 2 additional positions are expected within 3 years. (The department is also hiring 1 assistant professor in computational physics, and another in computational algebra who are expected to have strong link with the program.)

Space

There is no change in space requirements arising from the creation of this program. The department will host graduate students in existing labs, most of them CFI/BCKDF-funded. While additional CFI/BCKDF-funded are expected, the program can be delivered using existing labs.

Appendix A: Computer Science Job Market

The best jobs of 2017 (https://www.careercast.com/jobs-rated/2017-jobs-rated-report) include (median salary and projected growth are in parenthesis)

- #4 Information Security Analyst (\$90K/yr; 18%)
- #5 Data Scientist (\$111K; 16%)
- #8 Software Engineer (\$101K/yr; 17%),
- #13 Computer Systems Analyst (\$86K/yr; 22%)
- #19 Network and Computer Systems Administrator (\$78K/yr; 10%)
- #25 Web developer (\$66K/yr; 24%)
- #49 Computer programmer (\$80K/yr; -8%)

The toughest jobs to fill in 2017 from Forbes (median salary; 8 year growth outlook)

- #4 <u>Data scientist</u> (\$128K/yr; 16%)
- #6 <u>Software engineer</u> (\$101K/yr; 17%)
- #8 Information security analyst (\$90K/yr; 18%)

The 25 best-paying jobs for women right now (median salary)

- #4 Computer and information systems manager (\$81K/yr)
- #7 Software developer, applications and systems software (\$73K/yr)
- #10 Computer programmer (\$68K/yr)
- #13 Computer system analyst (\$65K/yr)

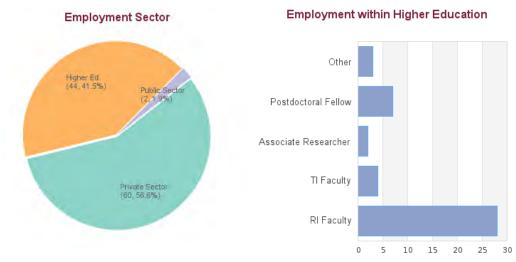
BC High demand management occupations (job openings by 2028; median wage rate 2017):

- Management: #5 Computer and information systems managers (4,800; \$43.27)
- Occupation: #3 Information systems analysts and consultants (8,700; \$38.46)
- Occupation: #4 Computer programmers and interactive media developers (8,000; \$38.46)
- Occupation: #8 Software engineers and designers (4,800, \$38.46)
- Occupation: #18 Web designers and developers (2,300; \$25.00)
- Occupation: #25 Computer engineers (except software engineers and designers) (1,100; \$40.50)

Appendix B: UBCV Ph.D. Career Outcomes

Information on UBCV Ph.D. in computer science outcomes¹⁶ is summarized below; a thorough study of Ph.D. career outcomes was performed in 2017¹⁷.

111 students graduated between 2005 and 2013. Of these, career information was obtained for 106 alumni (based on research conducted between Feb-May 2016):



RI (Research-Intensive) Faculty: typically tenure-track faculty positions (equivalent of the North American Assistant Professor, Associate Professor, and Professor positions) in Ph.D.-granting institutions

TI (Teaching-Intensive) Faculty: typically full-time faculty positions in colleges or in institutions not granting Ph.Ds., and teaching faculty at Ph.D.-granting institutions

Term Faculty: faculty in term appointments (e.g., sessional lecturers, visiting assistant professors, etc.)

SAMPLE EMPLOYERS IN HIGHER EDUCATION

University of British Columbia (5)

McGill University (3)

University of Waterloo (3)

University of Manitoba (2)

Swansea University

Stanford University

University of Utah

Ecole Polytechnique Federale de Lausanne (EPFL)

Swiss Federal Institute of Technology

University of Saskatchewan

SAMPLE EMPLOYERS OUTSIDE HIGHER EDUCATION

Google (12)

Microsoft (4)

Amazon (3)

Intel Corporation (3)

Disney (2)

Oracle Labs (2)

IBM (2)

Tasktop Technologies (2)

Tableau (2)

OriGene Technologies Inc.

SAMPLE JOB TITLES OUTSIDE HIGHER EDUCATION

Research Scientist (5)

Software Engineer (5)

Senior Software Engineer (4)

Chief Technology Officer (3)

Product Manager (3)

Software Development Engineer (2)

Senior Data Scientist (2)

Senior Research Engineer (2)

Advisory Engineer

Senior Research Scientist

http://outcomes.grad.ubc.ca/docs/UBC PhD Career Outcomes April2017.pdf

¹⁶ https://www.grad.ubc.ca/prospective-students/graduate-degree-programs/phd-computer-science

¹⁷http://outcomes.grad.ubc.ca/ full report available at

Appendix C: Curriculum Mapping

Learning objective	UBCV	UBCO
Research Proficiency Evaluation	Written report and oral exam	COSC 690, which also requires a written report and oral exam
Comprehensives	15 credits of breadth and 9 credits of depth	Same or alternatively instead of passing an entire course, pass an exam covering the same content
Thesis proposal	Oral exam	Same
At this point the candidate has	advanced to candidacy.	
Research completion	Thesis written and approved by external examiner and 2 UBC examiners (1 from the department, 1 from outside). Successful defence. Completion of CPSC 649 (0) Doctoral Dissertation	Same except completion of COSC 649 (0) Doctoral Dissertation

Curriculum Proposal Form

New/Change to Course/Program - Okanagan campus

Category: 1						
4 Faculty/School: ARSC Date: 20180608						
Dept./Unit: CMPS Contact Person: Dr. Yves Lucet						
Faculty/School Approval Date: 20181214 Phone: 250.807.9505						
Effective Session: 2019W1	Email: yves.lucet@ubc.ca					
5 Type of Action: New Program						
Rationale: See executive summary.						

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/pr oof/edit/index.cfm?tree=18,285,1087,134 9

Proposed Academic Calendar Entry:

Present Academic Calendar Entry:

Program Overview

Program Overview

This is a draft edition of the UBC Okanagan Academic Calendar. Please do not distribute this URL, and do not rely on this information for current academic requirements.

[17144] Degrees offered: M.Sc.

[17144] Degrees offered: M.Sc., Ph. D.

[17145] The Computer Science graduate program offers opportunities for advanced study leading to a Master of Science (M.Sc.) in Computer Science and Doctor of Philosophy (Ph.D.) in Computer Science. Research interests of Computer Science (and associated) faculty members include general computer science topics (algorithms, artificial intelligence, computer science education, databases, human-computer interaction, social networks models, etc.), optimization (nonlinear programming, convex, nonconvex and variational analysis, modeling, numerical simulations), and data science (computational statistics,

[17145] The Computer Science graduate program offers opportunities for advanced study leading to a Master of Science (M.Sc.) in Computer Science. Research interests of Computer Science (and associated) faculty members include general computer science topics (algorithms, artificial intelligence, computer science education, databases, human-computer interaction, social networks models, etc.), optimization (nonlinear programming, convex, nonconvex and variational analysis, modeling, numerical simulations), and data science (computational statistics, databases, design and analysis of experiments).

databases, design and analysis of experiments).	

Curriculum Proposal Form

New/Change to Course/Program - Okanagan campus

Category: 1						
6 Faculty/School: ARSC	6 Faculty/School: ARSC Date: 20180608					
Dept./Unit: CMPS Contact Person: Dr. Yves Lucet						
Faculty/School Approval Date: 20181214 Phone: 250.807.9505						
Effective Session: 2019W1	Email: yves.lucet@ubc.ca					
7 Type of Action: New Program						
Rationale: See executive summary.						

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/pr oof/edit/index.cfm?tree=18,285,1087,135 0

Proposed Academic Calendar Entry:

Present Academic Calendar Entry:

Admission Requirements

Admission Requirements

[17146] Master of Science (M.Sc.)

[17146] Master of Science (M.Sc.)

[17147] The M.Sc. program is governed by the regulations of the College of Graduate Studies, including its standards for admission of students.

[17147] The M.Sc. program is governed by the regulations of the College of Graduate Studies, including its standards for admission of students.

[17148] Applicants to the M.Sc. program will normally have an honours or a bachelor's degree in Computer Science. Applicants in a related field that fits within the program are also welcome to apply. For example, applicants with interest in Optimization and Theoretical Computer Science may have a degree in Mathematics and interest in the theory and practice of computing while applicants interested in data science may have a degree in Statistics and computational skills.

[17148] Applicants to the M.Sc. program will normally have an honours or a bachelor's degree in Computer Science. Applicants in a related field that fits within the program are also welcome to apply. For example, applicants with interest in Optimization and Theoretical Computer Science may have a degree in Mathematics and interest in the theory and practice of computing while applicants interested in data science may have a degree in Statistics and computational skills.

[17149] Applicants from a university outside Canada at which English is not the primary language of instruction, please see

[17149] Applicants from a university outside Canada at which English is not the primary language of instruction, please see

the English Language Proficiency Requirement for the minimum English language proficiency test scores required. the English Language Proficiency Requirement for the minimum English language proficiency test scores required.

[17150] While applications to the thesisand project-based option with no identified supervisor will be accepted, no applicant will be admitted to the thesis- or project-based options until a supervisor has agreed to supervise the student's thesis or project; thus, applicants who wish to pursue a thesis or project option are strongly urged to identify and contact a potential supervisor prior to applying [17150] While applications to the thesisand project-based option with no identified supervisor will be accepted, no applicant will be admitted to the thesis- or projectbased options until a supervisor has agreed to supervise the student's thesis or project; thus, applicants who wish to pursue a thesis or project option are strongly urged to identify and contact a potential supervisor prior to applying.

Doctor of Philosophy (Ph.D.)

The Ph.D. program is governed by the regulations of the College of Graduate Studies, including its standards for admission of students (see Ph.D. degrees admission).

Students admitted to the Ph.D. degree program normally must possess a masters degree in Computer Science or a related area with a B+ (76%) average or higher in their graduate coursework, with clear evidence of research ability or potential. In exceptional cases, students may be admitted directly to the Ph.D. program with only an honours bachelor degree (see Ph.D. requirements).

Transfer from the M.Sc. to the Ph.D.
program is permitted at the discretion of
the program, under regulations set by the
College of Graduate Studies.



Applicants from a university outside
Canada at which English is not the
primary language of instruction, should
review the English Language Proficiency
Requirement for the minimum English
language proficiency test scores.

While applications with no identified supervisor will be accepted, no applicant will be admitted to the program until a supervisor has agreed to supervise the student's dissertation; thus, applicants are strongly urged to identify and contact a potential supervisor before applying.

Curriculum Proposal Form

New/Change to Course/Program - Okanagan campus

Category: 1

8 Faculty/School: ARSC

Dept./Unit: CMPS

Faculty/School Approval Date: 20181214

Effective Session: 2019W1

Date: 20180608

Contact Person: Dr. Yves Lucet

Phone: 250.807.9505

Email: yves.lucet@ubc.ca

9 Type of Action: New Program

Rationale: See executive summary for the rationale to create the program. The rationale for the program requirements below is as follows:

5. **Research proficiency evaluation**: requires carrying out a small research project, writing a technical report, and defending the results orally in front of the student supervisory committee. At UBCO, this requirement is formalized as passing the

- course COSC 690 (3) Research Skills, which should be taken within 12 months. The intent is to quickly detect students who do not meet PhD-level research expectations.
- 6. Comprehensive requirement: assess breadth and ensure students have the background to carry out the research. Following the same format as UBCV CPSC, this requirement will be satisfied by passing 15 credits of breadth requirements and 9 credits of depth requirements. Alternatively, passing a single exam covering the content will be allowed. Upper-level courses and above taken during the bachelor, master or Ph.D. can count toward that requirement, although the supervisor and program coordinator will make sure the comprehensives include enough graduate level courses to meet the learning objectives of the PhD program especially with respect to depth of content and intensity of learning. The rationale to allow students to take courses instead of self-studying and passing an exam is that, in most cases, the comprehensive exam is the final exam of a graduate level course. Taking courses simplifies the process, increases the quality assurance, makes the program easier to deliver, and provides more opportunity, e.g., by allowing UBCV CPSC courses. A generic list of allowed courses will be available on the COSC website, and the program coordinator will approve each change to ensure the program integrity.
- 7. **Thesis proposal oral examination**: write a thesis proposal and defend it in front of the supervisory committee. This is the standard dissertation prospectus presentation. While a course could also be created for that purpose, it would create unnecessary scheduling constraints since the timeline for such oral examination is very specific to each student contrary to the research proficiency examination that has to be taken in the first 12 months.

At this point the candidate has advanced to candidacy.

8. **Research program completion**: carry out research under the supervisor's guidance, write the dissertation, and pass the defense; this is COSC 649.

Details about program requirements, including any form to fill out to meet requirements, will be explained on the COSC graduate program website.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/pr oof/edit/index.cfm?tree=18,285,1087,135 1

Proposed Academic Calendar Entry:

Present Academic Calendar Entry:

Program Requirements

Program Requirements

[17154] Master of Science (M.Sc.)

[17154] Master of Science (M.Sc.)

[17157] In addition to the general academic regulations for graduate students set out by the College of Graduate Studies, students in the M.Sc. in Computer Science select one of the following two options when they apply to the program:

[17157] In addition to the general academic regulations for graduate students set out by the College of Graduate Studies, students in the M.Sc. in Computer Science select one of the following two options when they apply to the program:

[17155]

[17155]

thesis option: 18 credits of coursework, plus a 12-credit M.Sc. thesis (COSC 549)

thesis option: 18 credits of coursework, plus a 12-credit M.Sc. thesis (COSC 549)

project option: 24 credits of coursework, plus a 6-credit M.Sc. project (COSC 550)

project option: 24 credits of coursework, plus a 6-credit M.Sc. project (COSC 550)

[17156] All coursework credit must be selected by the student in consultation and with the approval of the supervisor(s) from a list of core courses in Computer Science (COSC), Optimization (COSC or MATH), and Data Science (DATA or STAT) before being submitted to the program coordinator for approval. Other courses in similar disciplines like Computer Science

[17156] All coursework credit must be selected by the student in consultation and with the approval of the supervisor(s) from a list of core courses in Computer Science (COSC), Optimization (COSC or MATH), and Data Science (DATA or STAT) before being submitted to the program coordinator for approval. Other courses in similar disciplines like Computer Science

courses offered by UBC Vancouver (CPSC) and courses available through the Western Dean's or similar agreements are eligible subject to approval of the supervisor and program coordinator. The supervisory committee may require additional course work, if deemed necessary for successful completion of the program.

courses offered by UBC Vancouver (CPSC) and courses available through the Western Dean's or similar agreements are eligible subject to approval of the supervisor and program coordinator. The supervisory committee may require additional course work, if deemed necessary for successful completion of the program.

Doctor of Philosophy (Ph.D.)

In addition to the general academic regulations for graduate students set out by the College of Graduate Studies, the minimum requirements for the Ph.D. are:

- 1. Research Skills (COSC 690).
- 2. Comprehensive requirement.
- 3. Thesis proposal oral examination.
- 4. <u>Doctoral Dissertation (COSC 649).</u>

Students are admitted to candidacy after completing the first three requirements.

Additional requirements may be established by the student's supervisory committee. For detailed information on how each requirement is met (see CO\$C Ph.D. program).

Curriculum Proposal Form

New/Change to Course/Program – Okanagan campus

Category: 1 10 Faculty/School: ARSC **Date: 20180608** Dept./Unit: CMPS Contact Person: Dr. Yves Lucet Faculty/School Approval Date: 20181214 Phone: 250.807.9505 Effective Session: 2019W1 Email: yves.lucet@ubc.ca 11 Type of Action: New Courses **Rationale:** See executive summary for the rationale to create the program. COSC 649: this is the standard dissertation course for any PhD program. It mirrors CPSC 649 (0) Doctoral Dissertation **Draft Academic Calendar URL:** n/a **Proposed Academic Calendar Entry: Present Academic Calendar Entry:**

n/a

COSC 649 (0) Doctoral Dissertation

Pass/Fail

Curriculum Proposal Form

New/Change to Course/Program - Okanagan campus

Category: 1		
Category: 1		

Date: 20180608

Contact Person: Dr. Yves Lucet

12 Faculty/School: ARSC

Dept./Unit: CMPS

Faculty/School Approval Date: 20181214 Phone: 250.807.9505

Effective Session: 2019W1 Email: yves.lucet@ubc.ca

13 Type of Action: New Courses

Rationale: See executive summary for the rationale to create the program.

• COSC 690: this course formalizes the research proficiency evaluation. The goal is to quickly detect students who do not meet Ph.D.-level research expectations. The course requires the creation of original new results; not necessarily results that are of publishable quality. A Ph.D. candidate is expected to create such new knowledge within 12 months. The course is modeled after the existing COSC 590 (1-3) d Proseminar course since it shares similar learning objectives: literature review, written and oral presentation. The difference in number of credits is justified by the fact that 1 credit of COSC 590 does not require the creation of new knowledge while COSC 690 does. In addition, the credit count is indicative of the time commitment. COSC 690 is similar to UVic CSC 595 (1.5) Research Skills but emphasizes doing a research project vs. learning research methods.

Draft Academic Calendar URL: n/a **Proposed Academic Calendar Entry: Present Academic Calendar Entry:** n/a COSC 690 (3) Research Skills Completion of a small research project that generates original results. Written and oral presentation required. Pass/Fail.

Version 1

Executive Summary for a New Degree Program:

Ph.D. in Nursing

Version 1

Credentials to be awarded

Ph.D. in Nursing

Location

University of British Columbia, Okanagan campus. The program will be offered in the Faculty of Health and Social Development and administered by the School of Nursing.

Faculty members supporting the program

The following faculty will support the program:

Name	Rank	Faculty/Department
Marie Tarrant	Professor	FHSD/School of Nursing
Joan L. Bottorff	Professor	FHSD/School of Nursing
Barb Pesut	Professor	FHSD/School of Nursing
Kathy Rush	Professor	FHSD/School of Nursing
Donna Kurtz	Associate Professor	FHSD/School of Nursing
Nelly D. Oelke	Associate Professor	FHSD/School of Nursing
Susana Caxaj	Assistant Professor	FHSD/School of Nursing
Lise Olsen	Assistant Professor	FHSD/School of Nursing
Darlene L. Taylor	Assistant Professor	FHSD/School of Nursing

Anticipated Program Start

The program will be offered starting in 2019, winter term 1.

Anticipated completion time

The anticipated time for completion of the Ph.D. program is four years of full-time academic study. A work experience term is not required for degree completion.

Degree Credits

The Ph.D. in Nursing will require students to take four required courses (12 credits) in preparation for their comprehensive examinations and dissertation research project. The student will also be required to submit a research portfolio, and defend their dissertation at an oral examination.

Summary of Proposed Program

The proposed Ph.D. in Nursing program is designed to address shortages in nursing leaders and scholars both provincially and nationally. The Ministry of Advanced Education, Skills and Training requested expressions of interest and ability to expand existing graduate nurse programs in British Columbia. The Assistant Deputy Minister of Health and Chief Nurse Executive, Dr. David Byres, has identified the erosion of nursing leadership in the province and the need to support formal mechanisms for educating and mentoring nurse leaders. In response, the Schools of Nursing at UBC Vancouver and Okanagan campuses have submitted an Expression of Interest to expand opportunities for doctoral education in nursing. This would include increasing the seats in the Ph.D. in nursing program at the Vancouver Campus and opening a Ph.D. in nursing program at the Okanagan campus. Further, there is an urgent need for nurse scholars

in Canada. The Canadian Association of Schools of Nursing¹ estimates that current Ph.D. programs in Canada are preparing only 50% of the educators required to replace an aging professoriate.

The Ph.D. program in Nursing is designed to prepare researchers and leaders to develop the knowledge base of nursing. The goal of the program is to prepare graduates who demonstrate excellence in providing leadership to generate, integrate, and implement new disciplinary knowledge aimed at improving nursing, health, and health care.

The primary objectives of the Ph.D. in Nursing program are:

- 1. To provide a rigorous, high-quality doctoral-level graduate program in nursing that builds on UBC Okanagan's highly successful M.S.N. program
- 2. To enable students to actively participate in the development of nursing knowledge, adding to the evidence base to enhance nursing and health
- 3. To prepare outstanding nurse leaders to have expanded spheres of influence to enhance health and wellbeing of individuals, families and communities through leadership roles in academic institutions, practice settings, and policy arenas.

In addition to the general academic regulations for graduate students set out by the College of Graduate Studies, the minimum requirements for the Ph.D. in Nursing are:

- 1) 12 credits of coursework;
- 2) portfolio of research and leadership competencies
- 3) successful completion of comprehensive requirements; and
- 4) successful defence of the doctoral dissertation IGS 699 (0) Doctoral Thesis.

Anticipated contribution to the mandate of the institution

a) UBC Strategic Plan: SHAPING UBC'S NEXT CENTURY

Lead globally in research excellence, discovery, scholarship and creative endeavours: The Ph.D. in Nursing extends UBC's capacity for delivering graduate education in nursing that will increase research capacity, strengthen our partnerships with health authorities, government, and communities locally, nationally and internationally.

Lead globally and locally in sustainability, wellbeing and safety across our campuses and communities.

The Ph.D. in Nursing is inherently concerned with wellbeing and the resulting research will play a substantial role in creating a better understanding ways to promote and sustain wellbeing in diverse communities.

Inspire and enable students through excellence in transformative teaching, mentoring, advising and the student experience:

The teaching structure within the proposed program provides a unique learning environment that capitalizes on the School of Nursing's experience with flexible delivery models in the M.S.N. and the

¹ 2017 Available at www.casn.cawp-contents/uploads/2017/12/2015-2016_EN-SFS_FINAL-REPORT

exceptional talent of the nurse scientists in the School of Nursing and their diverse research programs to deliver an innovative program of exceptionally high quality. The Ph.D. in Nursing on the Okanagan Campus will leverage existing research partnerships with local, national, and international partners in nursing and health to provide excellent training opportunities and employment connections for students.

Partner with Indigenous communities on and off campus to address the legacy of colonialism and to co-develop knowledge and relationships.

The Ph.D. in nursing will provide an opportunity for students to conduct research in collaboration with Indigenous communities and be supervised by nurse scientists who have established nationally funded research programs focusing on Indigenous health and wellbeing based on models that support partnerships and co-development of knowledge. Faculty involved in the Ph.D. program have developed expertise in co-create knowledge and understanding across traditional boundaries and will support students to be interculturally aware and respectful of diversity.

b) UBC Okanagan: ASPIRE: ENVISIONING OUR FUTURE

Research Excellence: The School of Nursing has a highly qualified cadre of scholars working with culturally diverse populations; well-developed expertise in community-based research methods and integrated knowledge translation; and a Canada Research Chair in Health Ethics and Diversity. The proposed Ph.D. in Nursing, with an explicit focus on knowledge generation, will expand this capacity. Further, in addressing practice challenges in health promotion and health services, the Ph.D. program will strengthen research capacity and the potential for significant impact on wellbeing regionally and globally.

Transformative Learning: The proposed Ph.D. program capitalizes on the School of Nursing's experience with flexible delivery models in the M.S.N. to offer for the first time at UBCO a flexible delivery model for doctoral education. The proposed Ph.D. in Nursing will produce emerging nursing scholars and leaders who will fulfill the ASPIRE vision of developing graduates who are *creative and critical thinkers*, *resourceful*, *resilient*, *and leaders and agents of change*.

Community engagement: The Ph.D. program provides an opportunity to continue to build strong connections and collaborations between students, faculty, alumni and our regional and global communities. Community-based partnerships in research are the cornerstone of research conducted in the School of Nursing, and will infuse the Ph.D. in nursing program. Accordingly, given that the Ph.D. in Nursing is inherently concerned with the health of individuals and the resulting research will play a substantial role in creating a better understanding of health promotion, the prevention and treatment of illness progression, and better healthcare, particularly for culturally diverse populations regionally and globally.

Linkages between the learning outcomes and curriculum design

The following learning outcomes for the Ph.D. in Nursing identify what knowledge, skills and abilities students will have upon successful completion of all program requirements.

♦ Graduates will be able to:

- A. Critically analyse the epistemological, historical, and theoretical foundations of nursing scholarship.
- B. Demonstrate a high-level, comprehensive understanding of a substantive body of knowledge that is at the forefront of the discipline of nursing.
- C. Conceptualize, design, and conduct rigorous and cutting edge research to generate new knowledge or new applications that will make a substantial contribution to the discipline and to the improvement of health and wellbeing.
- D. Critically analyse, synthesise, and apply complex information that is relevant for practice and policy development in nursing, health promotion, and healthcare.
- E. Lead developments in knowledge application and translation in collaboration with stakeholders to support evidence-based nursing and health care.
- F. Effectively communicate complex and/or ambiguous ideas within and across practice and scholarly disciplines, and in society at large.
- G. Influence and lead change aimed at improving nursing, health and health care.

These learning outcomes will be achieved through completion of required coursework, a comprehensive examination, and completion of a dissertation research project. In addition, to assume leadership as a nursing scholar, students will develop a portfolio of relevant experiences that show how they have achieved selected leadership competencies in conjunction with NRSG 601 (Graduate seminar). These will be accomplished through a range of learning experiences tailored to individual needs. Leadership competencies may include the following:

- Writing competitive research funding proposals (e.g. SoN Internal Research Grants)
- o Conducting peer reviews (e.g. manuscripts, grant proposals)
- Conference & seminar participation (e.g. presentations, networking, planning)
- Research teamwork (e.g. participation, management)
- Interdisciplinary collaboration (e.g. committee work, project leadership)
- o Knowledge application (e.g. KT planning, implementation, policy innovation)
- Community engagement (e.g. leading a clinical research team)
- Teaching (e.g. planning, leading)
- Mentoring & consulting skills (e.g. advising a clinical research team)
- Writing for peer-reviewed publication

Potential areas/sectors of employment for graduates and/or opportunities for further study

Canada is experiencing an imminent shortage of qualified nursing faculty. The most recent report from the Canadian Association of Schools of Nursing² provides a compelling picture of this shortage:

- ⇒ In 2016, Schools of Nursing in Canada were unable to fill 57 full-time positions (2.1% vacancy rate).
- ⇒ In 2017, Schools of Nursing in Canada projected a need to hire 118 full time faculty.
- ⇒ Nursing Doctoral programs in Canada produce approximately 60 graduates per year in total, about 50% of what is required to fill anticipated shortages.

Graduates from the UBCO School of Nursing Ph.D. program will be well positioned to ameliorate this shortage. This will drive sustainability of the program in future. In addition, graduates will find nurse scientist and leadership positions in health authorities, government, NGOs, and research centres.

Delivery methods

The proposed Ph.D. in Nursing builds upon a robust M.S.N. program at the Okanagan Campus and a well-established Ph.D. in Nursing at the Vancouver Campus. The proposed program also takes advantage of existing collaborations with UBC Vancouver for cross fertilization of expertise and mentorship opportunities. Further, the School of Nursing has pioneered flexible delivery methods for graduate students on the Okanagan campus and now has significant experience in providing high quality education to students within province and across Canada. In light of this capacity, we are confident that the reputation and quality that defines our current graduate programs will extend into the proposed PhD program.

The primary methods of instruction for the Ph.D. in Nursing will include:

- Graduate seminars (on-campus)
- Synchronous (live webconferenced seminars) and asynchronous online delivery
- Comprehensive research projects, including dissertation projects

Support and recognition from other post-secondary institutions

The proposed Ph.D. in nursing program is supported by the School of Nursing at UBC Vancouver, who have provided us with curriculum and other related documents and have written a letter of support.

6

² 2017 Available at www.casn.cawp-contents/uploads/2017/12/2015-2016_EN-SFS_FINAL-REPORT

Contact information.

Dr. Marie Tarrant, Director and Professor, School of Nursing

Email: marie.tarrant@ubc.ca

Tel: 250-807-9908

Address: ART 360 1147 Research Rd University of British Columbia, Kelowna, BC V1V 1V7

Appendix to the Executive Summary

The School of Nursing's mission is to create an inclusive education, research, and practice culture that inspires inquiry, collaboration, and innovation. This mission is based upon values of professionalism, compassion, person-centred care, social justice, diversity, and critical inquiry. To realise this mission, the School has strategically expanded over the last 5 years with current enrolment at well over 600 students, including 78 graduate students. The School now has 64 faculty and instructors. Research-focused faculty currently hold 2.7M in research funding for 30 projects. The School includes 1 Institute and 1 Tier 2 Canada Research Chair. Programs of research align closely with the priorities of the Canadian healthcare context which places the School in an excellent position to offer a PhD program designed to prepare future nursing leaders and scholars.

1. History

Graduate education within the SON was initially established in 2006 with the introduction of a Master of Science in Nursing (M.S.N.) that prepares individuals for advanced practice, administration, and research. In 2014, the Master of Science in Nursing was revised as a flexible delivery program, combining online and in-person learning, so that students are able to invest in their career at the location that best meets their needs. The M.S.N. program offers opportunities for baccalaureate nurses to develop and advance their professional knowledge, practice, and scholarship. Graduate students engage in scholarly inquiry within a chosen area of nursing practice. In addition to a required core of foundation courses, students select either a course-based or a research-based stream. Both streams have part-time options and are offered via a combination of flexible delivery and intensive summer courses offered on campus.

Doctoral education within the SON began via the Interdisciplinary Graduate Studies program, which has served as an incubator for graduate degree program development on the Okanagan campus. While this has provided nurses in our region with an important opportunity to obtain a doctoral degree, there is an urgent need for doctoral education in nursing to meet current and future needs for nursing leadership in Canada. Currently, there are only two Nursing PhD programs in British Columbia, both of which are located in the southern region of the Province. Robust programs of research, faculty experienced in graduate supervision, and a well-established M.S.N. program that uses flexible delivery methods makes the UBCO School of Nursing well positioned to offer high quality doctoral education in nursing.

The Okanagan School of Nursing has provided excellent graduate education to date. Student enrolment within the M.S.N. program has increased considerably over the past 5 years, and now totals 78, 12% of the total master's enrolment at UBC Okanagan (667 students as of September 2018). Thirty-seven M.S.N.-thesis students and 16 Ph.D. students have completed, or are in progress, within the program.

The quality of the current M.S.N. students is reflected in the funding awarded to these students. Since the inception of the program in 2006, our graduate students, the majority of whom have been at the masters level, have received \$1,017,238 in support.

Table 1: Graduate Student Funding 2006-2018

Internal Awards	Tri-Council Awards	Other Awards
\$195,292	\$578,483	\$243,463

Further, a Doctoral program in nursing will contribute to the already vibrant culture of scholarship in the School. The School has 11 research faculty, including 4 Professors, 3 Associate Professors and 4 Assistant Professors. This team of established faculty with experience from other Canadian and international institutions, alongside a young, vibrant faculty, provide expert graduate supervision and researcher training. Their collective programs of research have established local and global impact. To date, the graduate program has developed numerous highly qualified personnel, many of whom appear as authors and or co-authors on the significant research output (168 grants and 455 publications between 2006 and 2018). Training of highly qualified personnel also plays a substantial role in grant capture. The table below outlines the research funding held by Faculty in the School of Nursing since 2006.

Table 2. Total research funding obtained by nursing faculty by major award category 2006-present

Funding source	UBC O SON	
Tri-council	\$5,787,353	
Other external*	\$3,880,664	
Research infrastructure	\$132,199	
UBC internal	\$848,329	
Total	\$10,648,545	

^{*}Other external funding comes from other government agencies, non-profit organisations, industry.

2. Resources Required

The program will require the following resources as reflected in the attached budget:

Faculty to teach four courses: The Ph.D. in Nursing program is based on the UBCV Ph.D. in Nursing model with 4 required courses to achieve program objectives. If costs based on sessional teaching fee of \$7500/course then \$30k/year is needed. However, this will not be sufficient to cover faculty time with dissertation supervision.

Support for flexible delivery: Zoom subscription

Library acquisitions: To augment library resources at UBCO (e.g., Indigenous methodologies, etc.)

Support for Indigenous Ph.D. nursing students for research activities: Commitment to support Indigenous PhD Nursing students is a unique aspect of this program and builds on the School of Nursing's success in supporting Indigenous students in our BSN and MSN program. In addition to access to School of Nursing faculty with extensive experience in Indigenous research and solid community partnerships, to demonstrate our commitment to Ph.D. Indigenous nursing students we will request targeted funding to support their research (e.g., to build relationships with community-based partners to enable their research; develop research agreements).

External examiners: To cover travel/accommodation expenses to enable external examiners to attend oral defences in person, and to provide a public lecture/seminar for faculty and students.

3. Required Coursework for Ph.D. in Nursing

The Ph.D. in Nursing requires completion of:

- NRSG580 (3) Philosophy of Evidence in Nursing
- NRSG581 (3) Leadership in Knowledge Application and Translation
- NRSG554 (3) Advanced Research Methods
- NRSG601 (3) Doctoral Seminar
- NRSG 699 (0) Doctoral Dissertation

NRSG 580 (3) Philosophy of Evidence in Nursing

This course introduces the philosophy of science and evidence as this is understood in the context of nursing scholarship. It creates the philosophical foundation upon which students can create informed claims about knowledge, theory and evidence regarding phenomena of concern to the discipline. Prerequisite: NURS 500

NRSG 581 (3) Leadership in Knowledge Application and Translation

Through an examination of philosophies, theories and praxis in the application of nursing knowledge, this graduate level course will prepare students to lead innovative research, education and practice in knowledge application and translation.

Pre-requisites: NRSG 504 (or equivalent graduate level course in knowledge and evidence-based practice).

NRSG 554 (3) Advanced Research Methods

This course involves intensive inquiry into research design issues relevant to nursing and health research, including the conduct of interdisciplinary research. It addresses issues in quantitative and qualitative research, and extends the discussion to consider the design and conceptual complexities of mixed and multiple method designs, and community-based research. Pre-requisites: NRSG 506, and NRSG 507 or equivalent graduate level quantitative and qualitative methods courses.

NRSG 601 (3) Doctoral Seminar

This course is designed as a set of student-centered seminars to provide an ongoing opportunity for PhD students to discuss phenomena relevant to nursing science, academia, the process of undertaking doctoral thesis research, and building sustainable careers in nursing science.

NRSG 699 (0) Doctoral Dissertation

Curriculum Proposal Form

New/Change to Course/Program – Okanagan campus

Category: 1

Faculty/School: FHSD/Nursing

Dept./Unit: Nursing

Faculty/School Approval Date: 20181015

Effective Session: 2019 W1

Date: 2018 12 18

Contact Person: Dr. Marie Tarrant

Phone: 250.807.9908

Email: marie.tarrant@ubc.ca

Type of Action: [delete other choices]

New Program: Adopted from the Currently Existing UBC Vancouver PhD in Nursing

Rationale: [explain why type of action is needed (e.g. is the new course filling a gap? Is a new faculty member bringing expertise? Is the course content being updated?); please provide context and rationale as intended audience is from various Faculties]

The proposed program is designed to address shortages in nursing leaders and scholars both provincially and nationally. The Ministry of Advanced Education, Skills and Training requested expressions of interest and ability to expand Graduate Nurse Programs in British Columbia. The Assistant Deputy Minister of Health and Chief Nurse Executive, Dr. David Byres, has identified the erosion of nursing leadership in the province and the need to support formal mechanisms for educating and mentoring nurse leaders. In response, the Schools of Nursing at UBC Vancouver and Okanagan campuses have submitted an Expression of Interest to expand opportunities for doctoral education in nursing. This would include increasing the seats in the PhD in nursing program at the Vancouver Campus and opening a Ph.D. in nursing program at the Okanagan campus. Further, there is an urgent need for nurse scholars in Canada. The Canadian Association of Schools of Nursing³ estimates that current Ph.D. programs in Canada are preparing only 50% of the educators required to replace an aging professoriate.

³ 2017 Available at www.casn.cawp-contents/uploads/2017/12/2015-2016_EN-SFS_FINAL-REPORT

11

Draft Academic Calendar URL:

URL

[URL from the draft Academic Calendar http://www.calendar.ubc.ca/okanagan/proof/edit - not the current, posted Academic Calendar.

Note: URL not required for individual courses.]

Proposed Academic Calendar Entry:

Ph.D. in Nursing

Program Objectives

The Ph.D. in Nursing program is designed to prepare researchers and leaders to develop the knowledge base of nursing. The goal of the program is to prepare graduates who demonstrate excellence in providing leadership to generate, integrate, and implement new disciplinary knowledge aimed at improving nursing, health, and health care.

The primary objectives of the Ph.D. in Nursing program are:

- 4. To provide a rigorous, high-quality doctoral-level graduate program in nursing that builds on UBC Okanagan's highly successful M.S.N. program
- To enable students to actively participate in the development of nursing knowledge, adding to the evidence base to enhance nursing and health
- To prepare outstanding nurse leaders to have expanded spheres of influence to enhance health and wellbeing of individuals, families and communities through leadership roles in academic institutions, practice settings, and policy arenas.

Eligibility requirements

Present Academic Calendar Entry:

None

Applicants to the program are admitted on the basis of outstanding achievement in their master's program; evidence of potential for research and scholarship; an ability to be selfdirected; and articulated goals in keeping with the resources available in the program, including available faculty support and programs of research. The number of qualified applicants that can be accepted in any given year is determined by faculty resources and other factors. Applicants must at minimum meet the admission requirements of the College of Graduate Studies. Canadian students must hold practicing nurse registration in BC or another Canadian province. International students must meet general eligibility criteria for nurse registration in BC.

Transfer from the M.S.N. to the Ph.D. in Nursing program is permitted under regulations set by the College of Graduate Studies.

Scholarship Opportunities:

A variety of scholarships are available for students pursing the PhD in Nursing program. For a listing of opportunities please visit PhD Scholarship Opportunities.

Admissions Proposal Form

Okanagan Campus

Faculty/School: FHSD/Nursing

Dept./Unit: Nursing

Faculty/School Approval Date: 20181015

Effective Session: 2019 W1

Date: December 18, 2018

Contact Person: Dr. Marie Tarrant

Phone: 250.807.9908

Email: marie.tarrant@ubc.ca

Type of Action: [delete other choices]

• New Admissions requirements – University level:

Rationale: [explain why type of action is needed; please provide context and rationale as intended audience is from various Faculties]

The proposed program is designed to address shortages in nursing leaders and scholars both provincially and nationally. The Ministry of Advanced Education, Skills and Training requested expressions of interest and ability to expand Graduate Nurse Programs in British Columbia. The Assistant Deputy Minister of Health and Chief Nurse Executive, Dr. David Byres, has identified the erosion of nursing leadership in the province and the need to support formal mechanisms for educating and mentoring nurse leaders. In response, the Schools of Nursing at UBC Vancouver and Okanagan campuses have submitted an Expression of Interest to expand opportunities for doctoral education in nursing. This would include increasing the seats in the Ph.D. in nursing at the Vancouver Campus and opening a Ph.D. in nursing program at the Okanagan campus. Further, there is an urgent need for nurse scholars in Canada. The Canadian Association of Schools of Nursing⁴ estimates that current Ph.D. programs in Canada are preparing only 50% of the educators required to replace an aging professoriate.

⁴ 2017 Available at www.casn.cawp-contents/uploads/2017/12/2015-2016_EN-SFS_FINAL-REPORT

14

Draft Academic Calendar URL:

URL

[URL from the draft Academic Calendar http://www.calendar.ubc.ca/okanagan/proof/edit - not/edit - not/edit - not/edit - not/english the current, posted Academic Calendar.

Proposed Academic Calendar Entry:

Applicants must meet the minimum academic requirements for graduate studies. Applicants must also satisfy the eligibility requirements to be considered for admission. Meeting the minimum requirements will not ensure admission.

Eligibility requirements

- A Masters of Nursing or a graduate degree in a health-related discipline from an approved institution with clear evidence of research ability and potential.
- Students entering directly from a bachelor's degree must, during the first two years of study, complete a total of 12 credits with a first-class average, of which at least 9 credits must be at the 500-level or above and at least 9 credits must be of first-class standing, to maintain registration as a doctoral student.
- Students who enter into the PhD in Nursing program after partial completion of a master's degree must, during the first two years of study, complete a total of 12 credits (at least 9 credits must be at the 500-level or above and at least 9 credits must be of first class standing) to maintain registration as a doctoral student. Also, students must demonstrate clear evidence of research ability and potential. Transfer into the doctoral program from a Master's program is

Present Academic Calendar Entry:

normally done after completion of the first year of study and will not be permitted after completion of the second year.

- In exceptional cases, applicants who hold a bachelor's degree with an overall 'A' average and who demonstrate advanced research ability may be granted direct admission to the Doctor of Philosophy in Nursing program on recommendation of the School of Nursing graduate program coordinator and with the approval of the Dean of the Faculty of Graduate Studies.
- Students entering directly from a bachelor's degree must, during the first two years of study, complete a total of 12 credits with a first-class average, of which at least 9 credits must be at the 500-level or above and at least 9 credits must be of first-class standing, to maintain registration as a doctoral student.
- Canadian students must hold practicing nursing registration in BC or another Canadian province.
- International students must meet general eligibility criteria for nurse registration in BC.

Curriculum Proposal Form

New/Change to Course/Program - Okanagan campus

Category: 1

Faculty/School: FHSD/Nursing

Dept./Unit: Nursing

Faculty/School Approval Date: 20181015

Effective Session: 2019 W1

Date: December 18, 2018

Contact Person: Dr. Marie Tarrant

Phone: 250.807.9908

Email: marie.tarrant@ubc.ca

Type of Action: [delete other choices]

New Program for UBCO

Rationale:

The proposed program is designed to address shortages in nursing leaders and scholars both provincially and nationally. The Ministry of Advanced Education, Skills and Training requested expressions of interest and ability to expand Graduate Nurse Programs in British Columbia. The Assistant Deputy Minister of Health and Chief Nurse Executive, Dr. David Byres, has identified the erosion of nursing leadership in the province and the need to support formal mechanisms for educating and mentoring nurse leaders. In response, the Schools of Nursing at UBC Vancouver and Okanagan campuses have submitted an Expression of Interest to expand opportunities for doctoral education in nursing. This would include increasing the seats in the PhD in nursing at the Vancouver Campus and opening a Ph.D. in nursing program at the Okanagan campus. Further, there is an urgent need for nurse scholars in Canada. The Canadian Association of Schools of Nursing⁵ estimates that current PhD programs in Canada are preparing only 50% of the educators required to replace an aging professoriate.

⁵ 2017 Available at www.casn.cawp-contents/uploads/2017/12/2015-2016_EN-SFS_FINAL-REPORT

17

Proposed Academic Calendar Entry:

Program Requirements

The Ph.D. in Nursing requires completion of:

- NRSG580 (3) Philosophy of Evidence in Nursing
- NRSG581 (3) Leadership in Knowledge Application and Translation
- NRSG554 (3) Advanced Research Methods
- NRSG601 (3) Doctoral Seminar
- NRSG 699 (0) Doctoral Dissertation

Students are also encouraged to seek suitable electives with guidance from their supervisor.

All doctoral students are required to successfully complete a comprehensive examination within 24 months of their enrolment in the Ph.D. program. After completing required coursework (plus any recommended electives as agreed upon by the student and the supervisor), students prepare an annotated bibliography. This serves as the foundation for the comprehensive exam, which comprises two essays in the form of a take home exam and an oral defence.

Students must complete their candidacy exam within the first 36 months in the doctoral program. After completing the comprehensive exam, students establish their supervisory committee and proceed to develop their proposal. The written proposal is approved by the committee, and is followed by an oral defence.

Draft Academic Calendar URL:

URL

[URL from the draft Academic Calendar http://www.calendar.ubc.ca/okanagan/pr oof/edit - not the current, posted Academic Calendar.

Note: URL not required for individual courses.]

Present Academic Calendar Entry:

(Cut and paste from the draft Academic Calendar.)

The major requirement for the Ph.D. is completion of a research dissertation (NRSG699), meeting the College of Graduate Studies requirements.	

Curriculum Proposal Form

New/Change to Course/Program – Okanagan campus

Category: 1

Faculty/School: Faculty of Health & Social

Development

Dept./Unit: School of Nursing

Faculty/School Approval Date: 2018/10/24

Effective Session: 2019S

Date: 20180919

Contact Person: Dr. Kathy Rush.

Phone: 250.807.9561 Email: kathy.rush@ubc.ca

Type of Action: New Course

Rationale: This new course will provide an advanced level research elective for our MSN thesis students. The course will also be open to other qualified graduate students seeking an advanced research methods course.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/courses.cfm?go=name&code=NRSG

Proposed Academic Calendar Entry:

NRSG 554 (3) Advanced Research Methods

Research design issues relevant to nursing and health research, including the conduct of interdisciplinary research, issues in quantitative and qualitative research, design and conceptual complexities of mixed and multiple method designs, community-based research.

<u>Pre-requisites: NRSG 506 and NRSG 507</u> <u>or equivalent graduate level quantitative</u> and qualitative methods courses.

Present Academic Calendar Entry:

None.

Curriculum Proposal Form

New/Change to Course/Program – Okanagan campus

Category: 1

Faculty/School: Faculty of Health & Social

Development

Dept./Unit: School of Nursing

Faculty/School Approval Date: 2018/10/24

Effective Session: 2019S

Date: 20180919

Contact Person: Dr. Kathy Rush

Phone: 250.807.9561

Email: kathy.rush@ubc.ca

Type of Action: New Course

Rationale: This is a new course that will serve as an additional elective for our MSN students. The course will better prepare our students to take on leadership roles in the

construction and advancement of disciplinary knowledge.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/courses.cfm?go=name&code=NRSG

Proposed Academic Calendar Entry:

NRSG 580 (3) Philosophy of Evidence in Nursing

Philosophical foundation upon which students can create informed claims about knowledge, theory and evidence regarding phenomena of concern to the discipline.

Prerequisite: NURS 500

Present Academic Calendar Entry:

Curriculum Proposal Form

New/Change to Course/Program – Okanagan campus

Category: 1

Faculty/School: Faculty of Health & Social

Development

Dept./Unit: School of Nursing

Faculty/School Approval Date: 2018/10/24

Effective Session: 2019S

Date: 20180919

Contact Person: Dr. Kathy Rush

Phone: 250.807.9561 Email: kathy.rush@ubc.ca

Type of Action: New Course

Rationale:

This is a new course that will serve as an additional elective for our MSN students to provide advanced preparation in order that graduates are prepared to lead knowledge application and translation in health-related areas. Knowledge application and translation is a priority for improving health care.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/courses.cfm?go=name&code=NRSG

Proposed Academic Calendar Entry:

NRSG 581 (3) Leadership in Knowledge
Application and Translation
Philosophies, theories and praxis in the
application of nursing
Pre-requisites: NRSG 504 (or equivalent
graduate level course in knowledge and
evidence-based practice).

Present Academic Calendar Entry:

Curriculum Proposal Form

New/Change to Course/Program – Okanagan campus

Category: 1

Faculty/School: Faculty of Health & Social

Development

Dept./Unit: School of Nursing

Faculty/School Approval Date: 20181015

Effective Session: 2019 S

Date: 20180919

Contact Person: Dr. Marie Tarrant

Phone: 250.807.8498

Email: marie.tarrant@ubc.ca

Type of Action: New Course

Rationale: NRSG 601 is required to support students with the transition to doctoral studies, preparing for doctoral requirements, grant and scholarship applications, and includes professional, situational and pragmatic training opportunities to support development as nurse scholars/scientists.

Proposed Academic Calendar Entry:

NRSG 601 (3) Doctoral Seminar
Phenomena relevant to nursing science,
academia, the process of undertaking
doctoral thesis research, and building
sustainable careers.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/courses.cfm?go=name&code=NRSG

Present Academic Calendar Entry:

Curriculum Proposal Form

New/Change to Course/Program – Okanagan campus

Category: 1

Faculty/School: Faculty of Health & Social

Development

Dept./Unit: School of Nursing

Faculty/School Approval Date: 2018/10/24

Effective Session: 2019S

Date: 20181213

Contact Person: Dr. Marie Tarrant

Phone: 250.807.9297

Email: marie.tarrant@ubc.ca

Type of Action: New Course

Rationale: Students are required to complete a research project to meet the requirements of this doctoral program. A dissertation reporting this research is the final product for this program.

Proposed Academic Calendar Entry: NRSG 699 (0) Doctoral Dissertation

Pass/Fail.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/courses.cfm?go=name&code=NRSG

Present Academic Calendar Entry:

Docket Page 131 of 180
Office of the Senate

University Centre | 322 – 3333 University Way Kelowna, BC V1V 1V7

Phone 250 807 9619 Fax 250 807 8007 www.senate.ubc.ca

25 April 2019

To: Senate

From: Senate Admissions & Awards Committee

RE: Policy O-200: Student Awards

Motion: That Senate approve Senate Policy O-200: Student Awards, effective 1 September 2019

The Senate Admissions & Awards Committee is pleased to present to Senate for approval the enclosed new Senate Policy O-200: *Student Awards*.

The proposed policy would be the first written student awards policy for the Okanagan Campus. Presently, the Okanagan Campus' awards policy is that which was in effect on the Vancouver campus at the time the Okanagan Campus was established in 2005. However, at that time, the Vancouver Campus' policy was also unwritten. As a result, the precise terms of the Okanagan campus' awards policy are highly uncertain. In practice, the Okanagan campus has generally applied the awards policy approved by the Vancouver campus in 2014.

In the fall of 2018, the Vancouver Senate approved changes to the Vancouver policy, the most substantive being a reduction in the number of credits required for awards eligibility from 27 to 24 credits. As the Vancouver Senate lacks the jurisdiction to impose these changes on the Okanagan campus, these changes are not effective in the Okanagan unless independently approved by the Okanagan Senate. The revised policy was considered by the Admissions & Awards Committee, and following a process of deliberation and consultation with the Faculties, College of Graduate Studies, and interested and affected administrative units, the Committee has developed the enclosed new draft policy for the Okanagan campus.

The enclosed draft adopts the above-mentioned reduction in the credit-value required for awards eligibility from 27 to 24 credits. Aside from this change, this policy makes no significant changes to the current practices on the Okanagan campus. Minor adjustments from the 2014 version of the Vancouver policy include:

1. Updating of language pertaining to adherence to human rights legislation, drafted in consultation with the Office of University Counsel (paragraph 3)

Okanagan Senate THE UNIVERSITY OF BRITISH COLUMBIA

Docket Page 132 of 180 Office of the Senate

University Centre | 322 – 3333 University Way Kelowna, BC V1V 1V7

Phone 250 807 9619 Fax 250 807 8007 www.senate.ubc.ca

- 2. Documentation of the process for updating and revising student awards, drafted in consultation with the Office of University Counsel (paragraph 6)
- 3. Clarification and codification of practices regarding the recording of student awards on student transcripts (paragraph 7)
- 4. Codification of practice of permitting students registered with the Disability Resource Centre to maintain eligibility for awards if enrolled in an approved, reduced course load (paragraph 15)
- 5. Creation of mechanism by which first-year students who fail to meet award renewal criteria may be permitted to retain a renewable award (paragraph 17)
- 6. Creation of mechanism by which eligibility for awards may be limited for students who are eligible to graduate, but choose to continue their studies (paragraph 20)
- 7. Codification of practices relating to student awards concerning co-op and exchange programs (paragraphs 21-26)

25 April 2019
Okanagan Senate Docket Page 133 of 180

THE UNIVERSITY OF BRITISH COLUMBIA



SENATE POLICY: O-200

Okanagan Senate c/o Enrolment Services 3333 University Way Kelowna, B.C. Canada V1V 1V7

Number & Title *O-200 Student Awards*

Effective Date:

1 September 2019

Approval Date:

25 April 2019

Review Date:

This policy shall be reviewed three (3) years after approval and thereafter as deemed necessary by the *responsible committee*.

Responsible Committee:

Senate Admissions & Awards Committee

Authority:

University Act, S. 37(1)

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

- ...(i) to recommend to the board the establishment or discontinuance of any faculty, department, course of instruction, chair, fellowship, scholarship, exhibition, bursary or prize;
- (j) to award fellowships, scholarships, exhibitions, bursaries and prizes;...

Purpose and Goals:

This policy is designed to guide the approval, revision, and administration of student awards to assist the University in its goals of attracting the most academically qualified students, rewarding their successes, supporting students in

25 April 2019
Okanagan Senate Docket Page 134 of 180

financial need, and encouraging donations, whether to individual Faculties or the College of Graduate Studies or the University's general scholarship and bursary funds.

The purpose of this policy is to establish and ensure fair, flexible and efficient administrative processes for *student awards* and associated funds.

Applicability:

This policy is applicable to any *student award* offered by the University using University funds or established through donations from donors to the University that is approved on or after the effective date of this policy. Any amendments to existing *student awards* approved on or after the effective date of this policy must also comply with this policy unless otherwise approved by Senate.

Exclusions:

None

Definitions:

For the purposes of this policy:

Academic Merit	shall refer to a student's academic performance as

represented by the student's academic average in 24 credits completed in a single session. For students completing more than 24 credits in a single session, the 24 credits used to calculate the academic average will be selected in the

manner most advantageous to the student.

Continuing shall refer to a student award given according to criteria

met or demonstrated by a student while enrolled as a student at the University or while completing non-credit

programming offered by the University.

Merit-based shall refer to a student award given based on academic

merit, other academic achievement, or other achievement,

such as service, leadership, or research.

Need-based shall refer to a student award given based on assessed

financial need.

Renewable shall refer to a student award that provides annual funding

over multiple academic sessions, subject to the student

meeting renewal criteria.

Student Award shall refer to any type of financial award or assistance,

including any bursary, fellowship, hybrid award, medal,

prize, or *scholarship*, that is given to students or participants in non-credit programming by the University using University funds or established through donations from donors to the University.

Student Award Types:

Bursary shall mean a student award that is solely need-based.

Fellowship shall mean a merit-based student award usually disbursed

at the beginning of an academic session to a graduate student primarily based on academic achievement and/or

research ability and potential.

Hybrid Award shall mean a student award for which neither financial need

nor academic achievement is the sole criterion considered. (e.g., a *student award* given on the basis of achievement other than academic achievement, including, but not limited to, service, leadership, or research, or a combination of academic and other achievement or a combination of academic and/or other achievement and financial need). Awards of this type may be identified as "Award" in the award title. *Hybrid awards* given in part on the basis of *academic merit* shall be identified as "Academic Award" in

the award description.

Medal shall mean a merit-based non-monetary student award,

normally given to a graduating student at the conclusion of an academic session based on *Academic Merit* or other

academic achievement.

Prize shall mean a merit-based student award given at the

conclusion of an academic session based on *academic merit* or other academic achievement such as performance in a particular course, research performance, or publication

record during the previous academic session.

Scholarship shall mean a merit-based student award given solely on the

basis of *academic merit* or other academic achievement usually disbursed at the beginning of an academic session.

Policy:

Approval of New Awards and Changes to Existing Awards

1. The University shall not normally approve *student awards* of any type other than the "*Student Award* Types" defined in this policy.

- 2. The title of any *student award* approved by the University must include the term defined in this policy that corresponds to the defined "*Student Award* Type" to which it belongs, except in the case of Hybrid Awards, which may be titled as "Award".
- 3. The University shall not approve any *student award* that is inconsistent with applicable human rights legislation or offends public policy. No part of this policy should be interpreted to preclude *student awards* that have as their object the amelioration of the conditions of disadvantaged individuals or groups or other *bona fide* and reasonable justification. When approving *student awards* established through donations from donors to the University for identifiable individuals or groups, the University shall consider the origin and context of the donor's gift.
- 4. In approving *student awards*, the University shall consider its stated commitments to equity, inclusion, and diversity.
- 5. The provisions of this policy are not applicable to the extent they conflict, either generally or in any specific instance, with Board of Governor's Policy #72 (Access to the University of British Columbia).
- 6. The Senate may periodically review the terms of a *student award* so that it may better meet new conditions, more fully carry out the spirit of a gift from a donor or maintain the usefulness of the *student award*. Where the Senate wishes to change the terms of a *student award*, the Senate will consult with the Office of the University Counsel to determine the necessary process and approvals required to implement that change.

The process and approvals will depend on factors such as:

- (a) Whether the *student award* is funded by the University or a donor;
- (b) If by a donor, whether funding is annual or endowed;
- (c) If endowed, whether the change is within the scope of the purposes of the endowment or whether the purposes of the endowment would require variation; and
- (d) If variation is required, whether the variation of the purposes of the endowment may be approved by the Board of Governors or requires court approval.

Where variation to the endowment purpose must be approved by the Board of Governors, the variation to the endowment purpose must be approved by the Board of Governors before changes to the terms of the *student award* are approved by Senate.

General

- 7. The recording of *student awards* on a student's official transcript of academic record shall be determined as follows:
 - a. *Hybrid awards* given in part on the basis of *academic merit*, *fellowships*, *medals*, *prizes*, *scholarships* and any other *student awards* given solely or partially based on *academic merit* or other academic achievement, shall be listed on the transcript of academic record unless otherwise approved by Senate.
 - b. *Hybrid awards* given based on criteria that do not include *academic merit* or other academic achievement shall not be listed on the transcript of academic record unless otherwise approved by Senate.
 - c. *Bursaries* and any other *student awards* that are solely *need-based*, shall not be listed on the transcript of academic record.
- 8. Student awards issued by the University are normally first applied to any tuition and other student fees owing. If the amount of the student award is greater than any tuition or other student fees owing, the excess amount is paid to the student.
- 9. The University does not guarantee the payment of any *student awards* other than those funded by the University. In any given year, if invested funds do not provide sufficient income to disburse any endowed *student award*, payment of the *student award* may be reduced or withheld. The University reserves the right to withhold *student awards* established through donations from donors to the University where the required funds have not yet been received by the University.
- 10. A recipient of a *student award*, other than a *bursary*, may accept the honour of a *student award* but decline the monetary value. Any funds so declined will be made available to another eligible student.
- 11. Student awards, other than prizes, medals or other student awards intended for graduating students, awarded for academic achievement in a specific Faculty or the College of Graduate Studies or a specific discipline or intended for students studying in a particular program are normally conditional upon the recipient maintaining registration in the same discipline or program during the funding period. A change in program by a student to a different Faculty or discipline may result in

reassignment of any unpaid funds associated with the award to another eligible student.

Undergraduate Awards

- 12. Unless otherwise stated in the award description, undergraduate *student awards* may be received only by students enrolled at the University during the Winter Session, as defined in the Academic Calendar.
- 13. Marks obtained in courses undertaken during Summer Session, as defined in the Academic Calendar, are not considered in the adjudication of *student awards*.
- 14. Subject to Paragraph 11, *continuing* undergraduate *scholarships*, and *hybrid awards* given in part on the basis of *academic merit* will normally be given to a student who
 - i. is registered in at least 24 percentage-graded credits in the current session or, for students enrolled in programs customarily requiring credits that are not percentagegraded, is registered in at least 24 total credits in the current session, with the required number of percentagegraded credits determined by the Faculty; and,
 - ii. has standing in the top 10% of his/her year and Faculty or an average of 75% or higher (with no failed courses) in the academic session on which the *student award* adjudication is based. Academic standing for students taking more than 24 credits will be determined on the basis of 24 percentage-graded credits to be chosen in the manner that is most advantageous to the student.
- 15. Paragraph 14 notwithstanding, students registered with the Disability Resource Centre and taking an approved reduced credit load may be eligible for *scholarships* and *hybrid awards* granted on the basis of *academic merit* if registered in fewer than 24 credits.
- 16. Recipients of undergraduate *continuing* and *renewable scholarships*, *hybrid awards* and other *student awards* given in whole or in part on the basis of *academic merit* are normally expected to be registered in 24 credits in order to retain their *scholarship* or *hybrid award*. *Scholarships* and *hybrid awards* given on the basis of *academic merit* are offered only to those who continue their studies to the satisfaction of the Registrar. Students registered in fewer than 24 credits in their final year of study may retain a *scholarship* or *hybrid award* given in

part on the basis of *academic merit* and/or be eligible for a *prize* or *medal* if their Faculty or School confirms that the number of credits in which the student is registered is sufficient for graduation. In this case, the monetary value of the *student award* may be reduced.

- 17. Recipients of undergraduate *continuing* and *renewable scholarships*, *hybrid awards* given in part on the basis of *academic merit* and other *student awards* given on the basis of academic achievement who fail to meet renewal requirements in their first year of study due to unforeseen personal circumstances may be permitted to retain their *student award* at the discretion of the Registrar or the academic or administrative unit responsible for administering the *student award*. Students permitted to retain their *student award* after failing to meet renewal requirements in their first year of study will normally not be permitted to retain their *student award* in future years should they again fail to meet renewal requirements.
- 18. Students who have completed at least one year of study at the University may be eligible to defer *scholarships*, *hybrid awards*, or other *merit-based student awards* for up to one year, provided they show satisfactory reasons for postponing attendance. Requests for deferment must be made to Enrolment Services. Students wishing to take up a deferred *student award* must advise Enrolment Services in writing before the first day of the Winter Session, as defined in the Academic Calendar, in which they intend to take up the *student award*, or such other date identified to the student at the time of or prior to the deferral of the *student award*.
- 19. Students who have been granted deferred admission will automatically have any *scholarships*, *hybrid awards* or other *merit-based student awards* deferred until they begin their study at the University unless the student is otherwise notified at the time the *student award* is offered or at the time the deferral of admission is granted.

In order to receive a deferred *student award*, students who are granted permission to defer their admission and therefore their *student award*, will have to satisfy any conditions of admission imposed at the time of admission, must apply to take up the deferred offer by the

- application deadline of the following year, and must register in the program and at the campus to which they were admitted.
- 20. Once a student has completed all requirements to graduate from the degree program in which the student is enrolled and is not otherwise ineligible to graduate, the student's eligibility for future *student awards* may be limited at the discretion of the Registrar, or in the case of a specific *student award*, the academic or administrative unit responsible for administering the *student award*.

Co-operative Education Programs

- 21. Students enrolled in co-operative education programs will be eligible to receive payments for *student awards* specifically intended for students enrolled in co-operative education programs during any academic session in which they are enrolled in a co-operative education program.
- 22. Students enrolled in co-operative education programs may remain eligible to receive award payments they would otherwise receive during any winter session in which they complete one or more co-op terms, despite being enrolled in fewer than 24 credits. Award payments may be adjusted to reflect the student's credit load or deferred to a later session.
- 23. Payments for *student awards* that would normally be deferred under this policy to a future academic session, may be made in extenuating circumstances to students enrolled in co-operative education programs at the discretion of the Registrar or the academic or administrative unit responsible for administering the *student award*.
- 24. Students may remain eligible to receive *student awards* in the winter session that follows a winter session in which they have completed one or more co-op terms despite having completed fewer than 24 credits in that winter session. Award payments may be adjusted to reflect the student's credit load in the previous term or deferred to a later session.

Exchange

- 25. Students enrolled in exchange programs will normally be eligible to receive payments for *student awards* during any academic session in which they are enrolled in an exchange program;
- 26. Students will normally be eligible for *student awards* in the winter session following the winter session in which the student was enrolled in an exchange program, in accordance with paragraph 14. Grades achieved while on exchange may be translated or adjusted for consistency with the University's standards and practices regarding grading and academic standing.

Graduate Awards

- 27. Student awards offered to graduate students, unless otherwise approved by Senate, are available only to support students engaged in full-time study and/or research leading to a degree at the University and will normally be paid only if the recipient is registered as a full-time student at the University during the payment period.
- 28. In cases where students are offered both major University graduate *fellowship* or *scholarship* funding and funding from a source external to the University for full-time study and research at UBC, the value of the University *fellowship* or *scholarship* funding will be adjusted as follows: if the value of the external award funding is less than the value of the University *fellowship* or *scholarship* funding, the student will receive the difference between the major University graduate *fellowship* or *scholarship* and external award funding. If the value of the external award funding is greater than or equal to the value of the University *fellowship* or *scholarship* funding, the University *fellowship* or *scholarship* funding may be withheld, or the amount may be adjusted. This provision is not intended to limit a student's ability to receive multiple awards from the University. The criteria by which graduate *student awards* are identified as major awards shall be determined by the College of Graduate Studies.

Vantage College

29. Student performance during the entire 11-month Vantage College program may be considered when assessing the eligibility of Vantage College students for *continuing student awards*

Calendar Statement:

As per the policy above.

Consultations

The following individuals and groups have been consulted during the development of this policy:

Enrolment Services
Office of the Provost & Vice-Principal Academic
Office of the Vice-Principal, Students
All Okanagan Faculties and Schools and the College of Graduate Studies
University of British Columbia Students Union Okanagan
Office of the University Counsel
Development & Alumni Engagement
Athletics
The Disability Resource Centre
Aboriginal Programs and Services
Office of the Ombudsperson for Students
Go Global Office
International Student Initiative

History:

This is the first version of this policy.

Related Policies:

Board of Governors Policy #72: Access to the University of British Columbia

Appendix:

There is no appendix to this policy.

Procedures:

There are no procedures accompanying this policy.



Office of the Senate
University Centre | UNC 322
3333 University Way
Kelowna, BC Canada V1V 1V7

Phone 250 807 9619 Fax 250 807 8007 www.senate.ubc.ca/okanagan

25 April 2019

From: Senate Admissions and Awards Committee

To: Okanagan Senate

Re: New Awards recommended for approval by the Okanagan Senate

a) New award: Charles E. Fipke Foundation Earth and Environmental Sciences Award

b) New award: UBC Students' Union Blue and Gold Scholarship

The Admissions and Awards Committee is pleased to recommend the following to Senate:

Motion: That Senate accept the new awards as listed and forward them to the Board of Governors for approval; and that a letter of thanks be sent to the donors.

NEW AWARDS:

a) Proposed Award Title: Charles E. Fipke Foundation Earth and Environmental Sciences Award

Awards totalling \$40,000 have been made available through an endowment established by the Charles E. Fipke Foundation for undergraduate or graduate students pursuing degrees in Earth and Environmental Sciences with preference given to students interested in geology. Awards will be given to students who demonstrate significant financial need, an exceptional work ethic, as well as academic strength. Subject to maintaining continued scholarship standing, undergraduate recipients may have their award renewed. Awards will be made on the recommendation of the Department of Earth, Environmental and Geographic Sciences in the Irving K. Barber School of Arts and Sciences and with respect to graduate awards, in consultation with the College of Graduate Studies. (First award available for the 2020/21 Winter Session)

b) Proposed Award Title: UBC Students' Union Blue and Gold Scholarship

A \$1,200 scholarship has been made available through an endowment established by the Student Union of UBC Okanagan for undergraduate students in even-numbered years and graduate students in odd-numbered years at the University of British Columbia, Okanagan campus. The award is adjudicated by Enrolment Services and in consultation with the College of Graduate Studies in odd-numbered years. (First award available for the 2019/20 Winter Session)

Respectfully submitted,

Tamara Ebl Vice-Chair, Admissions and Awards Committee



Office of the Senate University Centre | UNC 322 3333 University Way Kelowna, BC Canada V1V 1V7

Phone 250.807.9619 Fax 250.807.8007 www.senate.ubc.ca

25 April 2019

To: Okanagan Senate

From: Curriculum Committee

Re: Curriculum Proposals (approval)

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

Therefore, the following is recommended to Senate:

Motion:

That Senate approve and recommend to the Board of Governors for approval the new options and courses brought forward from the Faculty of Applied Science, the new courses brought forward from the Faculty of Arts and Sciences, the new course brought forward from the Faculty of Management, the new combined major and new courses brought forward from the Faculty of Creative & Critical Studies and the new courses brought forward from the Faculty of Education.

- a. From the Faculty of Applied Science
 - i. Resilient Infrastructure Management Option (RIM)
 - ii. Biomedical Engineering Option
 - iii. APSC 193
 - iv. ENGR 423
 - v. ENGR 450
 - vi. ENGR 420
 - vii. ENGR 422
 - viii. ENGR 439
 - ix. ENGR 469
 - x. ENGR 513
 - xi. ENGR 545
 - xii. ENGR 547

- xiii. ENGR 563
- b. From the Faculty of Arts and Sciences
 - i. BIOL 426
- c. From the Faculty of Arts and Sciences and the Faculty of Management
 - i. BIOL 424
 - ii. MGMT 470
- d. From the Faculty of Arts and Sciences and the Faculty of Creative and Critical Studies
 - i. SUST 104
 - ii. SUST 204, THTR 204
- e. From the Faculty of Creative and Critical Studies
 - i. Combined Major with French
 - ii. FREN 101
 - iii. FREN 102
- f. From the Faculty of Education
 - i. EDUC 300
 - ii. EDUC 400

For the Committee,

Dr. Peter Arthur Chair, Curriculum Committee



Category: 1

Faculty/School: School of Engineering

Dept./Unit: School of Engineering

Faculty/School Approval Date: 20190110

Effective Session: 2019W

Type of Action: New Program Option

Date: 20181214

Contact Person: Dr. Yang Cao

Phone: 250.807.9643 **Email:** yang.cao@ubc.ca

Rationale: The topic of Infrastructure Management has been under discussion for several years among professionals, researchers and government officials. The Canadian Society for Civil Engineering (CSCE), the Canadian Network of Asset Managers (CNAM) and Engineers Canada have been promoting infrastructure management for Canadian municipalities. Both organizations "recognize that asset management is a key element in the design, construction and maintenance of Canadian municipal infrastructure and a long term contributor to the sustainability of these essential systems." The School of Engineering has the core faculty expertise and offers several courses related to *infrastructure management*, which puts us in a unique position to introduce a specialization option in Civil Engineering. In line with this, the SOE would like to propose a new specialization called the Resilient Infrastructure Management (RIM) Option. The RIM Option will equip engineering students with the state-of-the-art skills, theories, and design methodologies they need to work in different capacities with municipalities, consultants and governments. Upon completion "Resilient Infrastructure Management Option" will appear on the student's transcript.

The benefit of this initiative to our School and students are:

- This will be the first initiative in Canada and globally, and will give us a unique identity.
- If this initiative materializes, the City of Kelowna will be used as a living lab, where different courses within this specialization stream will have access to up-to-date data from the city.
- This unique initiative in our School aligns us with an Engineers Canada certification program. Engineers Canada certifies professional engineers in Infrastructure Resilience Professional (IRP). The IRP "certification provides engineers with the additional knowledge and competencies they need to plan, design and manage resilient infrastructure in the face of a changing climate. The IRP certification provides increased confidence to infrastructure owners and operators, to governments, and to the public that the recommendations or approvals being made by these engineers are supported by advanced training and experience in climate vulnerability assessment, risk management and climate adaptation, on top of the robust set of requirements they must meet to be a licensed engineer." https://engineerscanada.ca/services/infrastructure-resilience-professional. https://engineerscanada.ca/services/infrastructure-resilience-professional. https://engineerscanada.ca/services/infrastructure-resilience-professional. https://engineering.com/services/infrastructure-resilience-professional. https://engineering.com/services/infrastructure-resilience-professional. https://engineering.com/services/infrastructure-resilience-professional. https://engineering.com/services/infrastructure-resilience-professional. https://engineering.com/services/infrastruct
- The Federation of Canadian Municipalities provides funding for educational training initiatives.



In October 2018, a three question student-driven survey was conducted to gauge potential interest in a new RIM Option among all year engineering students. A total of 381 students participated in the survey and the questions asked and results of the survey are:

1) Would you support a new civil engineering option in Resilient Infrastructure Management?

Results: 381 Students (79%) said YES

2) If a new civil engineering option in Resilient Infrastructure Management Option were available, would you consider taking it?

Results: 379 Students (42%) said YES

Based on the survey results, we expect strong enrollment in the proposed RIM Option.

Resilient Infrastructure Management Option

Proposed Academic Calendar Entry:

Available to Civil students, the Resilient
Infrastructure Management Option (RIM) will
equip engineering students with the state-of-the-art
skills, theories, and design methodologies they need
to work in different capacities with municipalities,
consultants and governments.

Application to the RIM Option is open to students in year 3 and above in the Bachelor of Applied Science program specializing in Civil Engineering.

Applications for admission must be made through the Engineering Advising Office by May 31st.

Enrolment in this option is limited so admission is competitive based on GPA.

The RIM Option under Civil Engineering requires

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,317,989,1380

Present Academic Calendar Entry:

N/A



the following courses:

- Required 4th year courses (as listed above) and Elective requirements:
 - o ENGR 424 Smart Cities
 - o ENGR 432 Infrastructure Management II
 - o <u>6 credits of Design Electives and 3</u> <u>credits of Technical Electives from a</u> <u>list of RIM Elective choices.</u>

Note that it is the student's responsibility to ensure that the electives chosen meet the program requirements for design and technical elective graduation requirements.

The option consists of a typical third year, followed by a set of prescribed fourth year courses.

Entry into and continuation in the Option requires that the student remains in Good Standing. Upon successful completion of the option, the notation "Resilient Infrastructure Management Option" will be added on the student's transcript.

Electives to be chosen from a list of approved RIM Option courses provided by the School of Engineering.



Category: $\overline{1}$

Faculty/School: School of Engineering **Date:** 20190129

Dept./Unit: School of Engineering Contact Person: Dr. Yang Cao

Phone: 250.807.9643 Faculty/School Approval Date: 2019.03.06 **Effective Session: 2020W** Email: vang.cao@ubc.ca

Type of Action: New Program Option

Rationale: Biomedical Engineering (BME) is a rapidly growing field that combines engineering, medicine, and life sciences. BME spans a wide range of areas, including, but not limited to: medical devices, informatics, imaging, robotics, nanotechnology, artificial intelligence, biomaterials, tissue engineering, and rehabilitation. The demand for BME at UBC Okanagan has been increasing with frequent inquiries by current and prospective students and we have reached a critical mass of faculty within the Electrical and Mechanical engineering programs with expertise in the biomedical field. Thus, we are able, with the addition of a couple courses, to offer a Biomedical Engineering Option for our Electrical and Mechanical Engineering students.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/ edit/index.cfm?tree=18,317,989,1381

Present Academic Calendar Entry:

N/A

Proposed Academic Calendar Entry:

Biomedical Option

Available to Mechanical and Electrical students, the Biomedical Option allows students interested in biomedical Engineering and wearable technology to have courses focused in these areas.

Application to the Biomedical Option is open to students in year 2 and above in the Bachelor of **Applied Science program specializing in Mechanical** or Electrical Engineering.

Applications for admission must be submitted to the **Engineering Advising Office by May 31st. Enrolment** in this option is limited and admission will be competitive based on GPA.

The Biomedical Option under Electrical Engineering requires the following courses:



a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

- APSC 193 Anatomy and Physiology for Engineers
- Required 4th year courses (as listed above) and:
 - o ENGR 401 Bioinstrumentation
 - ENGR 402 Biotechnology: Fundamentals and Applications
 - ENGR 406 Microelectromechanical Systems
 - o ENGR 423 Wearables
 - o ENGR 450 Clinical Engineering
 - o ENGR 482 Biomedical Engineering I
 - ENGR 499 Engineering Capstone
 Project Biomedical Project

Note that it is the student's responsibility to ensure that the electives chosen meet the program graduation requirements for design and technical electives.

The option consists of typical years one to three, followed by a set of prescribed fourth year courses with one additional required course (APSC 193) beyond the Bachelor of Applied Science degree.

Students may encounter difficulty fitting these courses into their schedule. Careful planning is essential and completion of the Option may require a summer session or an additional term of study.

Entry into and continuation in the Option require that the student remain in Good Standing. Upon successful completion of the option, the notation "Biomedical Option" will be added to the student's transcript.

Proposed Academic Calendar Entry:

Biomedical Option

Available to Mechanical and Electrical students, the Biomedical Option allows students interested in biomedical Engineering and wearable technology to have courses focused in these areas.

Application to the Biomedical Option is open to students in year 2 and above in the Bachelor of

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,317,989,1382



Applied Science program specializing in Mechanical or Electrical Engineering.

Applications for admission must be submitted to the Engineering Advising Office by May 31st. Enrolment in this option is limited and admission will be competitive based on GPA.

<u>The Biomedical Option under Mechanical</u> <u>Engineering requires the following courses:</u>

- APSC 193 Anatomy and Physiology for Engineers
- Required 4th year courses (as listed above) and:
 - o ENGR 351 Microelectronics I
 - o ENGR 401 Bioinstrumentation
 - ENGR 402 Biotechnology: Fundamentals and Applications
 - ENGR 406 Microelectromechanical Systems
 - o ENGR 423 Wearables
 - o ENGR 450 Clinical Engineering
 - o ENGR 482 Biomedical Engineering I
 - o ENGR 499 Engineering Capstone Project – Biomedical Project

Note that it is the student's responsibility to ensure that the electives chosen meet the program graduation requirements for design and technical electives.

The option consists of typical years one to three, followed by a set of prescribed fourth year courses with one additional required course (APSC 193) beyond the Bachelor of Applied Science degree.

Students may encounter difficulty fitting these courses into their schedule. Careful planning is essential and completion of the Option may require a summer session or an additional term of study.

Entry into and continuation in the Option require that the student remain in Good Standing. Upon successful completion of the option, the notation "Biomedical Option" will be added to the student's transcript.



Category: 1

Faculty/School: School of Engineering **Date:** 20190129

Faculty/School Approval Date: 2019.03.06 Phone: 250.807.9643
Effective Session: 2020S Email: yang.cao@ubc.ca

Type of Action: New Course

Rationale: This course will be needed for our Biomedical Engineering Option. APSC 193 will specifically cover the anatomy and Physiology needed for our biomedical engineering option. Selected content from HMKN 190 & 191 will be combined in this course that can be delivered to engineering students and ensures that we can offer the course outside of HMKN's regular schedule.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/courses.cfm?go=code&code=APSC

Proposed Academic Calendar Entry:

APSC 193 (3) Anatomy and Physiology for Engineers
Structure and function of the neuromuscular, skeletal, digestive, endocrine, urinary, circulatory, and respiratory systems of the human body.
Special emphasis on interfacing with biomedical devices. [3-2-0]

Present Academic Calendar Entry:

N/A



Category: 1

Faculty/School: Faculty of Applied Science Date: 2018.02.06

Department/Unit: School of Engineering Contact Person: Dr. Yang Cao

Faculty Approval Date: 2019.03.06 Phone: 250.807.9643
Effective Session: 2019W Email: yang.cao@ubc.ca

Type of Action: New course

Rationale: Wearable devices are an emerging area in industry with significant opportunity for innovation and advancements. According to the Grand View Market Research Report, the wearables market is expected to almost triple in the next 5 years. Wearables have tremendous potential to aid the aging population, address the increasing demand for personalized healthcare, and allow for increased patient involvement in healthcare decisions. This course will focus on how to design and prototype wearable devices. This course will be of interest to mechanical and electrical engineering students in the BME option.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/pro of/edit/courses.cfm?go=code&code=ENG R

version: August 2016

Proposed Academic Calendar Entry:

ENGR 423 (3) Wearable Devices
Design and prototyping including textiles, hardware, software, data storage, miniaturization, wireless communication, power, environment, and fabrication.
Analysis of wearable technologies and challenges of mass adoption. [3-2*-0]
Prerequisite: ENGR401

Present Academic Calendar Entry:

N/A



Category: 1

Faculty/School: Faculty of Applied Science

Department/Unit: School of Engineering Contact Person: Dr. Yang Cao

Faculty Approval Date: 2019.03.06 Phone: 250.807.9643
Effective Session: 2019W Email: yang.cao@ubc.ca

Type of Action: New course

Rationale: Clinical Engineering plays a crucial role in our health care system. Students with both a mechanical and electrical background may find clinical engineering knowledge and skills beneficial for future endeavors. The clinical engineering industry is experiencing rapid growth and biomedical engineering jobs are cited as one of the most rapidly growing areas in the USA. This course would be an introduction to the clinical environment, clinical tools (for screening, diagnostics, treatment, monitoring, and rehabilitation), and regulatory requirements. clinical environment, rehabilitation, clinical tools, and regulatory requirements. It would allow students hands-on experiences to explore the design challenges, regulatory requirements and needs in clinical engineering.

N/A

Draft Academic Calendar URL:

Date: 2018.02.06

http://www.calendar.ubc.ca/okanagan/proof/edit/courses.cfm?go=code&code=ENGR

version: August 2016

Proposed Academic Calendar Entry:

ENGR 450 (3) Clinical Engineering

The clinical environment, clinical tools (for screening, diagnostics, treatment, monitoring, and rehabilitation) and regulatory requirements. [3-2*-0]
Prerequisite: 4th Year Standing

Present Academic Calendar Entry:



Category: 1

Faculty/School: School of Engineering **Department/Unit:** School of Engineering

Faculty Approval Date: 2019.03.06 Effective Session: 2019W

Type of Action: New course

Date: February 10th, 2019

Contact Person: Dr. Yang Cao

Phone: 250.807.9643 Email: yang.cao @ubc.ca

Rationale: Aligned with interdisciplinary nature of training at the School of Engineering. this elective course will be useful for students from all disciplines at our School to learn about fundamentals of healthy buildings that allows the occupants within the building to operate at their highest functionality, as influenced by choice of building materials, construction techniques, electrical wiring, temperature, light, ventilation, plumbing, ergonomics and psychological factors.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/pro of/edit/courses.cfm?go=code&code=ENG

version: August 2016

R

Proposed Academic Calendar Entry:

ENGR 420 (3) Fundamentals of Healthy Buildings

Building biology, bio-house design, health effects of building materials, construction techniques, temperature, light, ventilation, plumbing, ergonomics, and psychological **factors** [3-0-0]

Pre-requisite: 3rd year standing

Present Academic Calendar Entry:

N/A



Category: 1

Faculty/School: Applied Science

Department/Unit: School of Engineering Faculty Approval Date: 2019.03.06

Effective Session: 2019W

Date: January 27, 2019

Contact Person: Dr. Yang Cao

Phone: 250.807.9134 Email: yang.ca@ubc.ca

Type of Action: New course

Rationale:

University of British Columbia Okanagan has taken great strides towards becoming an interdisciplinary hub for materials and manufacturing. One materials-related topic that is important for mechanical, civil, and manufacturing engineers is the interactions between solids and liquids. Whereas fluids have been studied from a flow perspective, little-to-no emphasis is placed on the fluid/surface interactions. These become important for dams, bridges, boats, additive manufacturing, and materials forming in general.

This course will discuss how liquids interact with solids, and how these interactions are affected by the chemical, physical, and mechanical properties of the solid, in addition to the viscosity, surface tension, and chemical structure of the liquid. The objective is for students to gain a deep understanding about how liquids and solids interact at interfaces. Examples will be drawn from all fields of engineering and the course is not tilted towards any one discipline.

Proposed Academic Calendar Entry:

ENGR 422 (3) Surface Engineering Surface energy, surface tension, contact angles, superhydrophobic surfaces, adhesion, roughness and texture, surface chemistry, and solid/liquid interactions. [3-0-0]

Prerequisite: APSC 252

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/ courses.cfm?go=code&code=ENGR

version: August 2016

Present Academic Calendar Entry:

N/A



Category: 1

Faculty/School: Applied Science

Department/Unit: School of Engineering **Faculty Approval Date:** 2019.03.06

Effective Session: 2021W

Date: 2019.01.31

Contact Person: Dr. Yang Cao

Phone: 250.807.9643 Email: yang.cao@ubc.ca

Type of Action: New course

Rationale: Broad knowledge of manufacturing processes and technologies play a crucial role in engineer's capability to develop new systems for production of advanced materials and components for the most demanding application. The current technological advances in the manufacturing sector create many employment and career opportunities for engineers who are well familiar with the modern manufacturing processes and able to design process technologies to meet the stringent product and application requirements. The students who successfully passed the materials science (APSC 259), mechanics (APSC 260), and manufacturing (ENGR 377) courses are well positioned to succeed in this course, therefore becoming well prepared for job opportunities in many industries, including advanced manufacturing, automotive, and aerospace.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/pro of/edit/courses.cfm?go=code&code=ENG R

version: August 2016

Proposed Academic Calendar Entry:

ENGR 439 (3) Manufacturing Processes II

Materials fabrication, forming, and joining: casting, rolling, forging, extrusion, and welding. Powder metallurgy and manufacture of metal alloys, metal matrix composites, and ceramics. Effect of fabrication process on evolution of crystallographic texture, residual stress, mechanical and service properties of materials. Process selection and technology development. [3-0-0]

Present Academic Calendar Entry:

N/A

Prerequisites: ENGR 377



Category: 1

Faculty/School: Applied Science

Department/Unit: School of Engineering **Faculty Approval Date:** 2019.03.06

Effective Session: 2019W

Type of Action: Change to Course

Date: January 27, 2019

Contact Person: Dr. Yang Cao

Phone: 250.807.9134 Email: yang.ca@ubc.ca

Rationale:

The changes applied to the syllabus aim to make students more familiar with the fundamentals of polymer science and engineering. I have included the concept of polymerization within the syllabus of this course, as Canada possesses many large polymerization plants distributed across the country. For instance, some of the world largest polyolefin polymerization plants, owned by Nova Chemicals, are located in Canada. I have included the concept of reinforced polymer composites and nanocomposites, as these materials are finding a broad spectrum of applications in various high-tech industries, such as aerospace, automotive and electronics, which are pivotal to Canada. For instance, the fuselage of Boeing 787 Dreamliner is composed of over 50% polymer composites, which is much lighter than the metals. I have included a few sessions on characterization of polymers, as Canada is significantly in short of engineers with expertise in polymer characterization, which is of high importance for polymer-related industries. I have included a few sessions on viscoelastic and mechanical properties of polymers. This allows mechanical and civil engineer students to get an in-depth understanding regarding the employment of polymers and polymer composites as meritorious substitutions for conventional materials, like metals and concrete, for structural applications.

I strongly believe the proposed syllabus will make the students well prepared for job opportunities in many polymer-related industries in Canada, including advanced manufacturing, automotive, and aerospace.

Proposed Academic Calendar Entry:

ENGR 469 (3) Polymer Engineering

Introduction to polymer science and technology, molecular structure of polymers, polymer synthesis, structure-property relationship in polymers, physical properties of polymers, reinforced polymers, polymer composites and nanocomposites, polymer characterization, polymer processing and forming. [3-0-0]

Pre-requisites: APSC 259 and APSC 260

Draft Academic Calendar URL:

https://courses.students.ubc.ca/cs/courseschedule? pname=subjarea&tname=subj-

section&dept=ENGR&course=469§ion=101

Present Academic Calendar Entry:

ENGR 469 (3) Polymer Engineering

Polymer synthesis, structure-property relations of polymers, mechanical properties of polymers, thermal properties of polymers, recyclable and biodegradable polymers, biopolymers, polymeric

version: August 2016

interfaces. [3-0-0]

Prerequisites: APSC 259, APSC 260



Category: 1

Faculty/School: Faculty of Applied Science

Dept./Unit: School of Engineering

Faculty/School Approval Date: 2019.03.06

Effective Session: 2019W

Type of Action: New course

Rationale: Nanomaterials and nanotechnology are helping to considerably improve, even revolutionize, many technology and industry sectors: energy, transportation, environmental science, information technology, medicine, homeland security, food safety, among many others, and therefore having amazing impact on our daily lives. Many everyday commercial products are currently on the market and in daily use that rely on nanoscale materials and processing technologies. The course will provide students with comprehensive understanding of the fundamentals and experimental approaches of the properties, fabrication, and characterization of nanomaterials, as well as their potential applications in many fields closely related to engineering, such as automotive, manufacturing, biomedical, batteries, solar cells, electronics etc.

Proposed Academic Calendar Entry:

ENGR 513 (3) Nanomaterials and **Nanotechnology**

Classification of nanomaterials, top-down and bottom-up approaches for nanomaterials synthesis, characterization techniques for nanostructured materials, nanomaterials properties (chemical, optical, thermal, electrical, magnetic, mechanical, and electrochemical), nanomaterials applications.

Draft Academic Calendar URL:

Date: 2019.02.26

Phone: 250.807.9643

Email: vang.cao@ubc.ca

Contact Person: Dr. Yang Cao

http://www.calendar.ubc.ca/okanagan/proof/edit/cou rses.cfm?go=code&code=ENGR

Present Academic Calendar Entry:

N/A



Category: 1

Faculty/School: Applied Science **Date:** 2019/02/04

Faculty/School Approval Date: 2019.03.06
Effective Session: 2019W

Phone: 250 807 9643
Email: yang.cao@ubc.ca

Type of Action: New Course

Rationale: Laser diagnostics are the primary tools used for measurements in both reacting and non-reacting engineering-related flows. Currently, a course that allows our students learn these measurement techniques is absent from our curriculum. Students who take this course will learn the fundamentals related to laser-based measurement techniques in thermo-fluids, interpret the measurements using image-processing tools, and generate knowledge. The covered material includes both reacting and non-reacting flows, training students with skills relevant to aerospace and energy industries.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/courses .cfm?go=code&code=ENGR

Proposed Academic Calendar Entry:

ENGR 545 (3) Laser-Based Measurements for Fluid Flows

Governing equations of reacting and non-reacting flows, measurement uncertainties, particle image velocimetry, laser Rayleigh scattering, Mie scattering, planar laser induced fluorescence, chemiluminescence measurements, and simultaneous velocity and combustion species measurements.

Present Academic Calendar Entry:



Category: 1

Faculty/School: Applied Science

Department/Unit: School of Engineering Faculty Approval Date: 2019.03.06

Effective Session: 2020W

Date: January 27, 2019

Contact Person: Dr. Yang Cao

Phone: 250.807.9134 Email: yang.ca@ubc.ca

Type of Action: New course

Rationale:

University of British Columbia Okanagan has taken great strides towards becoming an interdisciplinary hub for materials and manufacturing. One materials-related topic that spans several disciplines is the fundamental mechanics of adhesion and, in general, the interactions between different surfaces. Graduate students working on microfluidics (bonding surfaces together), polymer composites (fibre-matrix adhesion), biology (cell and bacteria attachment), solar cell development (joining different layers), textile modification (adhering a coating to a fabric), electronic thin films (deposition of one material onto another), or building materials (adhesion between masonry components) all need a strong background in the mechanics of adhesion.

This course will discuss how the interactions between solids and liquids arise, can be controlled, and are affected by both chemical and physical parameters of the interfaces separating the two phases. The objective is for students to understand the properties of surfaces and how they interact when in contact with either liquids or solids. Topics include surface energies and why surfaces are different from bulk material properties; wetting, capillarity, and the interactions between solids and liquids; adhesion, texture, and the mechanics of interfacial separation for two bonded solids; modification of surfaces to enable new materials properties; and recent developments in surface engineering including superhydrophobic surfaces, icephobic surfaces, low friction materials, and anti-fouling coatings.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/courses.cf m?go=code&code=ENGR

version: August 2016

Proposed Academic Calendar Entry:

ENGR 547 (3) Adhesion Mechanics

Capillarity, surface energy and surface tension, interfacial mechanics, models of wettability, adhesion, surface texturing and roughness, surface modification, recent developments in adhesion and surface engineering.

Present Academic Calendar Entry:

N/A



Category: 1

Faculty/School: Applied Science

Department/Unit: School of Engineering **Faculty Approval Date:** 2019.03.06

Effective Session: 2019W

Date: January 27, 2019

Contact Person: Dr. Yang Cao

Phone: 250.807.9134 Email: yang.ca@ubc.ca

Type of Action: New course

Rationale:

University of British Columbia is investing significantly towards strengthening materials research field at the Okanagan campus. Materials and Manufacturing Research Institute (MMRI) and 1540 Building are the early appearance of this initiative. To this end, polymer science and technology plays a central role, as many of the engaged professors will use polymers in their research field. For instance, Dr. Arjmand develops multifunctional polymer composites and nanocomposites, Dr. Milani uses polymer composites for structural and aerospace applications, Dr. Golovin employs polymers for surface coating, Dr. Liu uses polymer for battery applications, Dr. Zarifi uses polymers for microelectronics, to name some. The broadness of polymer employment by numerous professors at UBCO necessitates a course on the technology of polymers to make graduate students familiar with this area. The request for this course is on high demand; for instance, 5 graduate students are currently participating in ENGR 469 (Polymer Engineering-Undergraduate Course) to get familiar with the concepts of polymer engineering. Given the number of graduate students joining UBCO annually who will have a polymer-related research, it is necessary to establish a polymer graduate course. Moreover, there are numerous high-tech industries in Canada such as aerospace, automotive, electronics and defense that use polymer-based materials. This dictates the training of HQP with expertise in polymer science and engineering.

The materials presented in the syllabus of the course are in line with the needs of the faculty members at UBCO and the industry in Canada. For instance, thermodynamics of polymer solutions is embedded into the course syllabus as many professors, including Dr. Arjmand, Dr. Golvin and Dr. Liu, use polymer solutions in their research field. Mechanical properties of polymers are included within the syllabus, as professors like Dr. Arjmand and Dr. Milani use polymers for structural applications. Rheology and polymer forming are included into the syllabus, as 3D printing and polymer shaping are frequently used by various faculty members at UBCO, without having any solid understanding about rheology and processing-structure-property relationships of polymers.

version: August 2016



a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

Proposed Academic Calendar Entry:

ENGR 563 (3) – Advanced Polymer Science and Engineering

Introduction to polymer science, polymer chain architecture and configuration, thermodynamics of polymer solutions, amorphous and crystalline states of polymers, rubber elasticity, networks and gels, polymer viscoelasticity and rheology, mechanical properties of polymers, multicomponent polymer systems, polymer processing and forming.

Draft Academic Calendar URL: N/A

Present Academic Calendar Entry:

None



Category: 1

Faculty/School: IKBSAS **Date:** November 9, 2018

Faculty/School Approval Date: 20190108 Phone: 250.807.8541

Effective Session: 2019W Email: michael.devholos@ubc.ca

Type of Action: New Course

Rationale: This course will expand available upper-level electives for students in the Biology (BIOL) and Biochemistry and Molecular Biology (BIMB) programs and is especially relevant to those contemplating careers in biomedical research or health professions. The course has been offered successfully every year since 2016WT2 as a special topics course (BIOL 420B), with enrolment of 40 students per year. During each of these years, it has been fully enrolled, with students on its waitlist. The proposed course would replace the existing BIOL 420B special topics course.

Proposed Academic Calendar Entry:

BIOL 426 (3) Cancer Biology

The molecular and cellular basis of cancer. Introduction to principles of oncology including prevention, diagnosis and treatment. [3-0-0]

Prerequisite: One of BIOL 311 or BIOC 304; all of BIOL 200, BIOL 265, BIOL 318.

Draft Academic Calendar URL:

n/a

Present Academic Calendar Entry:

n/a



Category: 1

Faculty/School: IKBSAS Date: 20180927

Faculty/School Approval Date: 20190205 Phone: 250.807.8245

Effective Session: 2019W **Email:** nathan.pelletier@ubc.ca

Type of Action: New Course

Rationale: This course trains upper level undergraduate students in the concepts and application of two core theoretical frameworks for deconstructing complex food system sustainability issues. The course has been offered every year since 2016W as special topics BIOL 420C (Global Food Systems: Society, Ecology, Sustainability) with enrolment of roughly 35 students per year. The course provides a critical bridge between sustainability theory, measurement, and management applications. The proposed course would replace the special topics course.

Draft Academic Calendar URL:

n/a

Proposed Academic Calendar Entry:

BIOL 424 (3) Global Food Systems:
Society, Ecology, Sustainability
Evaluating food system sustainability
issues, including management and
technology alternatives, through the
lenses of (1) systems-analytic (i.e., life
cycle) thinking and tools; and (2)
sustainable scale (relative to ecological
carrying capacity), distributive justice,
and efficient allocation. Credit will be
granted for only one of BIOL 424 or
MGMT 470. [3-0-0]

Prerequisite: Third-year standing.

Equivalency: MGMT 470

Present Academic Calendar Entry:

n/a



Category: 1

Faculty/School: Faculty of Management

Dept./Unit:

Faculty/School Approval Date: 20181211

Effective Session: 2019W

Date: 20181120

Contact Person: Dr. Nathan

Pelletier

Phone: 250.807.8245

Email: nathan.pelletier@ubc.ca

Type of Action: New Course

Rationale: This cross-listed Biology/Management course trains upper level undergraduate students in the concepts and application of two core theoretical frameworks for deconstructing complex food system sustainability issues. The course has been offered every year since 2016W as special topics BIOL 420C/MGMT429D (Global Food Systems: Society, Ecology, Sustainability), with enrolment of roughly 35 students per year. The course provides a critical bridge between sustainability theory, measurement, and management applications. The proposed course would replace the special topics course.

Proposed Academic Calendar Entry:

MGMT 470 (3) Global Food Systems: Society, Ecology, Sustainability

Evaluating food system sustainability issues, including management and technology alternatives, through the lenses of (1) systems-analytic (i.e. life cycle) thinking and tools; and (2) sustainable scale (relative to ecological carrying capacity), distributive justice, and efficient allocation. Credit will be granted for only one of BIOL 424 or MGMT 470. [3-0-0] *Prerequisite*: 3rd year standing in the B.Mgt program or Faculty of Management permission.

Equivalency: BIOL 424.



Faculty/School: IKBSAS (FCCS) Date: 2018/12/20

Dept./Unit: English and Cultural Studies **Faculty/School Approval Date:** 2019/03/19 **Contact:** Bernard Momer **Phone:** 250.807.9406

Effective Session: 2020W Email: Bernard.momer@ubc.ca

Type of Action: New Course

Category: 1

Rationale: The new Bachelor of Sustainability program and the Environmental Humanities concentration are being reviewed in the Barber School of Arts and Sciences. FCCS is formally reviewing only new courses to be delivered by that faculty, such as this course, which has been developed as a core course to support the new Bachelor of Sustainability program.

Environmental concern is one of the defining features of contemporary culture. Disputes and policy dilemmas over environmental problems raise new cultural questions and renew some old ones. A new configuration of humanities disciplines, including ecocriticism, environmental history, cultural geography, cultural anthropology, and environmental philosophy and ethics, seeks to answer such questions. This course provides students with an overview of the environmental humanities and assesses their contribution to sustainability research by means of a specific case study with relevance to the Okanagan Valley and British Columbia.

Draft Academic Calendar URL:

n/a

Proposed Academic Calendar Entry:

SUST 104 (3) Introduction to
Environmental Humanities
Explores the contribution of historical,
philosophical, anthropological, and
literary scholarship to elucidation and
mitigation of a specific environmental
issue. Restricted to students in the
Bachelor of Sustainability program. [3-0-0]

Prerequisite: SUST 100 recommended.

Present Academic Calendar Entry:

n/a

Version: August, 2015



Category: 1

Faculty/School: IKBSAS (FCCS)

Dept./Unit: English and Cultural Studies Faculty/School Approval Date: 2019/03/19

Effective Session: 2020W

Date: 2018/12/20

Contact: Bernard Momer **Phone:** 250.807.9406

Email: Bernard.momer@ub.ca

Type of Action: New Course

Rationale: This course has been developed within FCCS to support the new Bachelor of Sustainability program. The B.Sust. program will be housed in the Barber School of Arts and Sciences, but the Environmental Humanities concentration will include courses offered by FCCS. This new course is intended to enhance students' communication skills across a range of media, and to develop their understanding of the constructive role of arts-based research in interdisciplinary sustainability research. The course is cross-listed with THTR because the learning outcomes of this course also correspond to the goals of applied performance and social practice within the Theatre discipline and Creative Studies. SUST/THTR 204 explores concrete strategies designed to apply creative arts methodologies and skills for the purposes of multi-modal understanding, communication, mediation, problem-solving, and constructive engagement with and between particular communities and disciplines. The course is practice-based, and students learn through hands-on experience as well as studio exercises, class discussions, lectures, assignments, and readings.

Proposed Academic Calendar Entry:

SUST 204 (3) Creative Communication and Engagement Using experiential and collaborative learning, students of sustainability improve their communication skills as

speakers, listeners, collaborators, leaders and problem solvers. Credit will be granted for only one of SUST 204 or THTR 204. [3-0-0]

Prerequisites: SUST 104 recommended.

Equivalency: THTR 204.

THTR 204 (3) Creative Communication and Engagement

Using experiential and collaborative learning, students of sustainability

Draft Academic Calendar URL:

n/a

Present Academic Calendar Entry:

n/a



a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

improve their communication skills as speakers, listeners, collaborators, leaders and problem solvers. Credit will be granted for only one of THTR 204 or SUST 204.

Prerequisites: SUST 104 recommended.

Equivalency: SUST 204.



Category: 1
Faculty/School: FCCS
Date: 2019 02 01

Faculty/School Approval Date: 20190215 Phone: 250.807.9343
Effective Session: 2019W1 Email: ramine.adl@ubc.ca

Type of Action:

New French combined major option

Rationale:

The addition of a combined major option in French will create some flexibility for students who may wish to pair French with other disciplines that offer a combined major option. There are currently combined major options in Art History and Visual Culture, Creative Writing, Cultural Studies, and English. The credit distribution for the minor, combined major and the major are provided below:

Major	Combined Major	Minor
48 credits	36 credits	30 credits
100-200 level (15cr)	100-200 level (15cr)	100-200 level (12cr)
FREN 122, 123	FREN 122, 123	FREN 122, 123
FREN 215	FREN 215	
FREN 222, 223	FREN 222, 223	FREN 222, 223
300-400 level (30 cr)	300-400 level (21 cr)	300-400 level (18 cr)
FREN 353, 355	FREN 353, 355	FREN 353, 355
two of FREN 344, 345,	two of FREN 344, 345,	
444, 446	444, 446	
18 credits UL FREN	9 credits UL FREN	12 credits UL FREN
Elective		
3 credits FREN any level		



a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

Proposed Academic Calendar Entry:

[16924] Major in French

Combined Major with French

Students may declare a combined major with French at any time. Students must maintain a cumulative average of 65% in their FREN courses to remain in the combined major.

The combined major in French can be completed in four years by students who have already completed Grade 12 French (or equivalent) or who have a certified A2 level of competency in French prior to enrolment in the program. Students without these prerequisites are likely to need more than four years to complete the combined major in French.

A combined major is created by satisfying the requirements for a combined major in French and another B.A. program that offers a combined major (currently Art History and Visual Culture, Creative Writing, Cultural Studies, and English). A single course can only fulfill the combined major requirement for one program.

The French requirements for the combined major include the following:

First and Second Years

B.A. requirements, including the following:

- FREN 122, 123
- FREN 215
- FREN 222, 223

Third and Fourth Years

- FREN 353, 355
- two of FREN 344, 345, 444, 446
- 9 additional credits of FREN at the 300 and 400 level

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,283,902,1338

Present Academic Calendar Entry:

[16924] Major in French

[16933] Minor in French



Category: 1

Faculty/School: Faculty of Creative & Critical

Studies

Dept./Unit: Languages and World Literatures **Faculty/School Approval Date:** 20190215

Effective Session: 2019W1

Phone: 250.807.9343 Email: ramine.adl@ubc.ca

Contact Person: R. Adl & F.

Date: 2019-02-01

Langevin

Type of Action:

FREN 101 – **new course** for true beginners.

FREN 102 – **revised content** to existing FREN 102 course.

Rationale:

Context for the proposal

Following internal discussions within FCCS, the French program is undertaking a fundamental change of direction which aims, as of September 2019, to deliver strictly a language program aimed at training students to achieve a B2/C1 level of competency in the "diplôme d'études en langue française" (DELF) and "diplôme approfondi de langue française" (DALF) exams. The DELF and DALF are diplomas awarded by the French Ministry of Education to prove the French-language skills of non-French candidates (see http://www.ciep.fr/en/delf-dalf) and they have become the standard credential to verify French proficiency. These exams follow the Common European Framework or Reference for Languages (CEFR) which has gradually become an internationally recognized framework to establish language proficiency. This shift of emphasis in the program direction will better serve the majority of students pursuing a French major, as most of them aim to enter a career in teaching at the high-school level, and B.Ed. programs are increasingly requiring CEFR certification for those wishing to become language teachers. We also believe that such a program may attract teachers who are already in the system and wish to improve their credentials; it may also be of interest to students in other fields who feel that they could benefit from an official certification of French fluency. Along with the alignment of the French program with the CEFR, the larger goal is to establish UBCO as a testing center for the DELF/DALF exams. These changes and goals are also being pursued at the Point Grey Campus by the French program.

New course, FREN 101 and revised content to FREN 102

Our current structure of 3 beginner-level language courses does not give us enough contact hours with students to achieve all the goals set out by the CEFR Levels A1 and A2. While the grammatical/lexical content of our courses is adequate, our current methodology is mostly text-based and focuses on grammar and composition, not allowing us much time to develop aural and oral skills; however, the DELF/DALF exams require candidates to be able to fully function within all four language skills (reading/writing/listening/speaking). The addition of a new course to our series of beginner-level French courses, along with the adoption of a communicative approach, will allow us to fully complete CEFR levels A1 and A2 in four courses, which is the same model implemented by the Vancouver campus. FREN 101 and 102 would complete CEFR level A1. FREN 103 and 104 complete CEFR level A2. These changes are in essence a redistribution of material from three to four courses, with the addition of roughly 36 hours of contact which will allow for fuller aural/oral development. This proposal will allow the redistribution of material from FREN 102 into two courses, FREN 101 and FREN 102.



a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

Impact on students

New students may have to complete up to 12 credits of French (depending on their French level when admitted to UBC) rather than the previous maximum of 9 to fulfill the current BA language requirement; however, that is in line with the other languages offered both on this campus and at the Point Grey campus.

Existing students will not be impacted since the course being added is placed at the beginning of the existing progression.

Alignment with UBCV French program

This proposal, as well as the accompanying changes to FREN 103 and 104, will align our 100-level French courses with the Vancouver campus which has also already adapted its 100-level courses with the CEFR guidelines.

Vectors are removed for FREN 102.

Proposed Academic Calendar Entry:

FREN 101 (3) Elementary French I

For the beginner. Prepares students to understand and use familiar everyday expressions and to function in basic situations such as communicating personal details and responding in simple social settings.

Corresponds to level A1 of the Common European Framework of Reference for Languages (CEFR).

FREN 102 (3) Elementary French II

Continuation of Elementary French I. Completes level A1 of the Common European Framework of Reference for Languages (CEFR).

<u>Prerequisite: FREN 101 or prior introductory</u> French course at CEFR Level A1.

Present Academic Calendar Entry:

N/A

FREN 102 (3) Beginner's French I
For the complete beginner. Grammar,
composition, reading, and oral practice.
Students who have completed French 12 cannot
normally receive credit for FREN 102. If French
12 was completed more than four years ago or
with a grade lower than 65%, a student may seek
approval from the Department of Critical Studies
to receive credit for this course. [1-0-2] or [3-0-0]



Category: 1

Faculty/School: Faculty of Education **Date:** 2019/02/14

Dept./Unit: Okanagan School of Education Contact Person: Dr. Peter Arthur

Faculty/School Approval Date: 2019/03/22 Phone: 250.807.9207

Effective Session: 2019W Email: peter.arthur@ubc.ca

Type of Action:

New Course - EDUC 300: Inquiry in Education

Rationale:

This third year seminar course is designed to provide undergraduate students with an opportunity to explore the processes and products of inquiry in education. This course aligns well with strategy 8 of the UBC Strategic Plan that articulates the importance of research in undergraduate education. Further, The Okanagan School of Education would like to create a greater presence on campus as this elective course will be used for recruitment.

Note: The prerequisite is EDUC 100 or 3rd year standing. We feel that EDUC 100 provides the educational knowledge & critical reading and writing to be successful in this course. However, we also feel that by 3rd year students will have had enough academic learning to be successful.

Note: Enrollment Target will not exceed 35



a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

Proposed Academic Calendar Entry:

EDUC 300 (3) Inquiry in Education
An introduction to the distinctive manner
in which core concepts and methods of
scholarly inquiry are applied to education
as a field of inquiry. Through a variety of
hands-on learning activities, readings,
seminars, discussions, and personal
reflection students will explore the
processes and products of inquiry. [3-0-0]

<u>Prerequisite: EDUC 100 or 3rd year</u> standing

Draft Academic Calendar URL: URL

[URL from the draft Academic Calendar http://www.calendar.ubc.ca/okanagan/proof/edit - not the current, posted Academic Calendar.

Note: URL not required for individual courses.]

Present Academic Calendar Entry:

(Cut and paste from the draft Academic Calendar.)



Category: 1

Faculty/School: Faculty of Education Date: 2018/02/14

Faculty/School Approval Date: 2019/03/22 Phone: 250.807.9207

Effective Session: 2019W Email: peter.arthur@ubc.ca

Type of Action:

New Course – EDUC 400: Designing and Facilitating Effective Learning

Experiences

Rationale:

This fourth year seminar course is designed to provide students with an opportunity to develop evidence-based design and facilitation skills. Many students whether they are planning to be teachers or not find themselves in situations where they could benefit from knowing how to design and facilitate a learning experience. For example, many of our teaching assistants and tutors could benefit. Additionally, the Okanagan School of Education would like to create a greater presence on campus and see this elective course as a recruitment tool.

Note: The prerequisite is EDUC 100 or 3rd year standing. We feel that EDUC 100 provides the educational knowledge & critical reading and writing to be successful in this course. However, we also feel that by 3rd year students will have had enough academic learning to be successful.

Note: Enrollment Target will not exceed 35



a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

Proposed Academic Calendar Entry:

EDUC 400 (3) Designing and **Facilitating Effective Learning Experiences**

Leverage evidence based principles, approaches, methods, and strategies to design and facilitate effective learning experiences. [3-0-0] Prerequisite: EDUC 100 or Third-year

standing

Draft Academic Calendar URL: URL

[URL from the draft Academic Calendar http://www.calendar.ubc.ca/okanagan/proo f/edit – **not** the current, posted Academic Calendar.

Note: URL not required for individual courses.]

Present Academic Calendar Entry:

(Cut and paste from the draft Academic Calendar.)



Office of the Senate

Brock Hall | 2016 - 1874 East Mall Vancouver BC V6T 1Z1

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

25 April 2019

To: Senate

From: Senate Nominating Committee

Re: A) Appointments to the Council of Senates

B) Appointment of a President's Advisory Committee for the Selection of

a Deputy Vice-ChancellorC) Committee Vacancies

Appointments to the Council of Senates

The Nominating Committee has noted that there is a vacancy on one of the Senate committees formed to provide representation of the Okanagan Senate on the Council of Senates. After a consideration of candidates, the Committee is pleased to recommend:

That Dean Bryce Traister be appointed to Council of Senates Okanagan Representative Committee Four to replace Dean Wisdom Tettey (resigned).

The Nominating Committee would note that while Dean Traister is a member of the committee, he was not present for the deliberations on this recommendation.

Appointment of a President's Advisory Committee for the Selection of a Deputy Vice-Chancellor

The Nominating Committee has received notification from the President's Office of his intent to strike a Search Committee pursuant to Joint Board/Senate Policy 18 (Appointment of Designated Senior Academic

Administrators: https://universitycounsel.ubc.ca/policies/policy18.pdf) for the recommendation of the next Deputy Vice-Chancellor for the Okanagan campus. Pursuant to Section 20 of the procedures to that policy, the Okanagan Senate will appoint four (4) senators to that Search Committee. Interested senators should submit a nomination to christopher.eaton@ubc.ca by Friday 3 May 2019. The Nominating Committee will then make recommendations for appointments to the Search Committee at the May meeting of Senate.



Committee Vacancies

The Nominating Committee has noted vacancies on the Senate Learning and Research Committee for two faculty members or deans, and on the Senate Academic Building and Resources and Appeals of Standing and Discipline committees for a convocation member. Interested senators should submit a nomination to christopher.eaton@ubc.ca by Friday 3 May 2019. The Nominating Committee will then make recommendations for appointments to the Search Committee at the May meeting of Senate.