

Okanagan Senate

THE SEVENTH REGULAR MEETING OF THE OKANAGAN SENATE FOR THE 2016/2017 ACADEMIC YEAR

THURSDAY 30 MARCH 2017

3:30 P.M. | ASC 130

- 1. Minutes of the Meeting of 23 February 2017 Dr Santa Ono (approval) (docket pages 2-16)
- 2. Business Arising from the Minutes Dr Santa Ono (information)
- 3. Remarks from the Chair and Related Questions Dr Santa Ono (information)
- 4. Remarks from the Deputy Vice-Chancellor and Related Questions Prof. Deborah Buszard (information)
- 5. Academic Building & Resources Committee Dr Daniel Keyes

2017-2018 Draft Budget Presentation – Prof. Deborah Buszard with Associate Vice-President Robert Einarson (information) (docket pages 17-30)

6. Admission & Awards Committee – Dr Marianne Legault

New and Revised Awards (approval) (docket page 31)

7. Curriculum Committee – Dr Peter Arthur

Curriculum Proposal from the faculties of Applied Science, Arts & Sciences, and Creative & Critical Studies (approval) (docket pages 32-54)

8. Nominating Committee – Dr Daniel Keyes

Adjustments to Committee Memberships (approval) (docket page 55)

9. Report from the Registrar – Dr Kate Ross

A Comprehensive Learning Record for UBC (information) (docket pages 56-73)

- 10. Presentation of Certificates of Appreciation for Student Representatives for 2016-2017 completing their terms on Senate Dr Santa Ono (information)
- 11. Other Business

OKANAGAN SENATE

MINUTES OF 23 FEBRUARY 2017

DRAFT

Attendance

Present: Dr D. Buszard (Vice-Chair), Dr K. Ross (Secretary), Ms L. Allan, Dr P. Barker, Ms H. Berringer, Dean B. Binsted, Mr M. Campbell, Dr R. Campbell, Dr D. Carter, Ms C. Comben, Dr J. Corbett, Mr I. Cull, Dr R. Eggleston, Dr M. Evans, Dean M. Grant, Dr J. Johnson, Mr D. Kandie, Dr D. Keyes, Dr R. Lalonde, Mr J. Lammers, Dr R. Lawrence, Dr S. Lawrence, Dr M. Legault, Ms K. Lu, Dr Y. Lucet, Dr V. Magnat, Dr C. Mathieson, Dr S. McNeil, Dr S. O'Leary, Dr S. Ono (via telephone), Ms A. Park, Dr F. Pena, Dr R. Sadiq, Ms S. Sneg, Dean R. Sugden, Ms K. Trapara, Ms J. Vinek, Dr D. Walker, Dr G. Wetterstand, Dr P. Wylie

Regrets: Dr P. Arthur, Mr N. Azu, Ms P. Babunga, Dr L. Berg, Ms E. Gallaccio, Chancellor L. Gordon, Dr J. Jakobi, Dr C. Labun, Mr J. McEwan, Dean M. Parlange, Dr J. Stites Mor, Dr E. Taylor, Dean W. Tettey

Clerk: Mr K. McCleery

Call to Order

Professor Deborah Buszard, Vice-Chair of Senate, called the meeting to order at 3:30 pm.

Minutes of the Previous Meeting

Catherine Comben } That the Minutes of the Meeting of 26 January Shira Sneg 2017 be adopted as circulated.

Approved

Business Arising from the Minutes

Mr. McCleery noted that a concern had been raised at the meeting of 26 January 2017 regarding the scheduling of the fall midterm break in the 2017/18 academic year presented by the Registrar. A Senator had suggested that the fall midterm break should be scheduled on the Tuesday following the Remembrance Day statutory holiday, rather than the Friday preceding the holiday.

Mr. McCleery advised that Enrolment Services had considered the comments made at Senate and the implications of both options for scheduling the midterm break. Having found no compelling reason to change the academic year as presented to Senate on 26 January 2017, Enrolment Services has decided that the midterm break will remain on Friday, November 10th, 2017 as originally scheduled.

Remarks from the President

Prof. One addressed Senate by telephone, and apologized for being unable to attend in person.

The re-appointment request of the Deputy Vice-Chancellor and Principal of UBC Okanagan is under review. This process is nearing its end and it is hoped that it will be possible to communicate the results of the review shortly.

The search for a new Provost and Vice-President Academic for UBC Vancouver is also underway. The search committee has met and narrowed the large pool of candidates to six semifinalists, who will be interviewed in the coming weeks. The semi-finalists will be narrowed to a pool of two to three finalists. Prof. Ono advised that his hope is that it will be possible to announce the finalists and have them appear in person.

The search for a new Vice-President of Research, a position with system-wide responsibility, is also ongoing. The position was previously titled "Vice-President of Research and International", but the role will be split between two individuals. The title may change to "Vice-President of Research and Innovation" to align with the significant focus on innovation at the Provincial and Federal levels of government, but a final decision has not yet been made. The search is going well, and it has been gratifying to receive significant interest in the role from many well-qualified candidates. This pool has not yet been narrowed to an intermediate stage, but this will be done in the next several weeks.

The University also needs to make a decision regarding the role of Vice-President Development and Alumni Relations. This position is currently held by Barbara Miles, who is nearing the end of her second term. University regulations indicate that Vice-Presidential appointments are normally limited to two terms, but it is possible that, in consultation with the Board of Governors, Ms. Miles' tenure could be extended past the two term limit. Conversations with the Board of Governors are ongoing, and a decision has not yet been made. This position also has significant system-wide responsibilities.

Lisa Castle, the Vice-President of Human Resources, is also nearing the end of her term and has indicated that she intends to retire. A search will be initiated to identify the next Vice-President of Human Resources. This process has not yet commenced due to the other significant search processes already underway. Once a new Provost and Vice-President Academic has been identified for the Vancouver campus, and significant progress has been made in the Vice-President Research search processes, the search will begin for the new Vice-President Human Resources, likely in the summer.

Prof. Ono advised that, earlier in the day, UBC, the University of Washington, and Microsoft announced the beginning of a Microsoft-sponsored collaboration between the University of

Washington and UBC. Microsoft has made an initial \$1 million contribution to catalyze this partnership.

This partnership, called the Cascadia Collaborative, will provide matching funds to both institutions to initiate significant and sustainable research collaborations between researchers at the two institutions. The collaborative will also establish a summer program taking place in alternate years at UBC and the University of Washington, focusing initially on how to use data science, and later other fields, to bring about "social good", including in the areas of health, economy, sustainability, and clean energy.

Prof. Ono explained that the Premier of British Columbia, Christie Clark, has named him British Columbia's Chief Innovation Officer. In this role, Prof. Ono will work with all of British Columbia's College and University Presidents as well as Chief Executive Officers, Chief Technical Officers and Chief Scientific Officers of all high-tech firms in the Province to establish a network, perform a gap analysis of the technology ecosystem, and propose to the government of British Columbia changes or investments that can be made by the Province to enhance British Columbia's innovation pipeline. These efforts will focus on technology transfer, as well as how to best support fundamental science in the Province. This initiative has arisen out of broad agreement between the government and the opposition that while the Provincial economy is currently very strong, it is important for British Columbia to grow its knowledge economy and fuel the growing innovation economy in both the Interior and the Lower Mainland. This interest is in part the result of a global analysis of regions and cities conducted by the Boston Consulting Group which has identified, British Columbia, and the Vancouver-Seattle corridor as among the most promising high-tech regions in the world.

Remarks from the Deputy Vice-Chancellor

Dr. Buszard explained that, on February 21, 2017, the BC Minister of Finance tabled the provincial Budget. BC's economic growth is forecast to be 2.1 per cent in 2017 and 2018, and 2.0 per cent in 2019. The government is projecting a surplus of \$295M in 2017/18, with surpluses of \$244 million and \$223 million in the subsequent two years of the Fiscal Plan.

Increases are proposed for the Ministry of Advanced Education (AVED) budget, but it is not yet clear what these increases represent. Over the three year period, there is a \$99 million increase in the AVED budget, to an annual budget of \$2.08 billion. The only specific commitments signalled are \$14 million over three years to Emily Carr University, \$8 million to BCNET for IT, and \$5 million toward student mental health.

The increases are in addition to increases last year, which were for wage increases under the government's "Economic Stability Mandate" (its public sector collective bargaining mandate). The AVED Service Plan released with the budget indicates that the number of post-secondary student spaces (full-time equivalents or FTEs) will increase by 2,168 over the next three years (from 200,341 in 2016/17 to 202,509 in 2019/20).

The BC government is also proposing to lower the interest rate on student loans to prime from August 2017 (from prime-plus-2.5%), this will save those repaying loans \$11.3 million this year and \$17 million in each of the next two years (student groups have been advocating for this for

years); and committing \$2.6 billion of capital spending for new buildings and renewal of infrastructure at post-secondary institutions. UBC's Life Science Teaching Laboratories and the Teaching and Learning Centre are among the major capital projects receiving government funding.

On Monday, January 30th and Tuesday, January 31st, events were held on campus commemorating the tragic events at the Quebec City Mosque which had occurred over the preceding weekend. It was very clear that Muslim students and others were deeply affected and concerned. We heard various suggestions for future activities to address these concerns and will be working to address this as part of a wider approach to Diversity and Inclusion on campus. Dr. Buszard expressed that she was looking forward to continuing the conversation with students and other groups on this important issue.

Dr. Buszard advised Senate that, in recognition of the changing dynamics of UBC's students -including the increase in complexity of the diversity of both domestic and international students
on both campuses -- the Board of Governors established a Commitment to Diversity Fund in
2016. This fund is intended to engage, enhance and embed diversity into university systems and
operations. As part of this university-wide initiative, UBC Okanagan's Planning and Institutional
Research office and the Associate Vice-President Students are conducting a study on equity and
diversity and will be facilitating various focus group meetings. This will help the campus to
better understand the needs and opportunities to support our diverse student population. Data and
findings gathered from students, staff and faculty dialogues will formulate a set of priorities and
recommendations for a framework for the student diversity fund for presentation to the Board of
Governors in September 2017.

Dr. Buszard explained that a draft vision statement has been created to launch the strategic planning process. The aim is to help articulate UBC's purpose as a place of teaching and research, and to inform priorities and goals for the coming years. The draft vision statement put forward to serve as a foundation for further conversations is "*Learning*, *research and engagement for a better world*." Everyone has been invited to share their thoughts and comments on what this draft statement means and how we might bring it to life. The President also took part in a live Facebook discussion on the Strategic Planning Process on February 15th. That is also available to be viewed as a video online.

Dr. Buszard advised that various UBC Okanagan related items were received or approved at the February board meeting including \$35 M for the construction of the Teaching and Learning Centre, and Sustainability and Enrolment Reports for both campuses. Board agendas, reports and minutes are available on the Board of Governors website.

Dr. Buszard explained that it is her intention going forward to provide a regular email bulletin to the campus community to ensure all staff, faculty and students have the opportunity to follow the UBC governing bodies.

Senator Sneg asked how the provincial funding for student mental health would be spent.

Dr. Buszard responded that the provincial government had not yet announced any details relating to this funding.

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Candidates for Degrees

Deborah Buszard Cynthia Mathieson That the candidates for degrees and diplomas, as recommended by the faculties and College be granted the degrees for which they were recommended, effective February 2017, and that a committee comprised of the Registrar, the relevant deans, and the Chair of the Senate be empowered to make any necessary adjustments.

Approved

Admission & Awards Committee

ADMISSION REGULATION CHANGES FOR THE FACULTY OF MANAGEMENT

Marianne Legault Roger Sugden That Senate approve changes to admission requirements for applicants to the Master of Management program, effective for admission to the 2017 Summer Session and thereafter.

Approved

2017-2018 ENROLMENT TARGETS

Marianne Legault Catherine Comben That Senate approve the 2017-18 enrolment targets, as per section 27(2)(r) of the University Act, as outlined in the attached report.

With permission of Senate, the Deputy Registrar, Mr Alfred Vogt, spoke to the report.

Dr Lalonde asked why the UBC Okanagan is targeting the admission of 22 more students than the Ministry of Advanced Education will fund.

Mr Vogt responded that the enrolment targets are above the Ministry targets as there will be a natural oscillation in enrolment from year to year, and the bottom of that isolation should align with 100% of the Ministry targets. The University will be in a better position when speaking with government if it is consistently meeting the Ministry's targets.

Dr Wylie asked why the enrolment targets for bachelor of arts students has not increased from last year, while there are fairly ambitious increases in enrolment targeted for other programs.

Mr Vogt responded that the University would be happy to enrol more arts students than it did last year if there are a sufficient number of qualified applicants. The enrolment targets

were prepared before data about this year's applicant pool were available. We now know that there is an 11% increase in domestic arts applications. The University would be quite happy to have an 11% increase in arts enrolment if the applicant pool allows such an increase. If it appears that this increase in demand will be sustained, the University would consider increasing targets in future years.

Dr Ross added that UBC Okanagan is defying national trends with an increase in the number of arts applicants, as there is generally a drop in demand for bachelor of arts programs across Canada.

Dr Wylie noted that total enrolment of bachelor of arts students across four years will be lower in 2017/18 than it was in 2016/17, returning enrolment to 2005 levels and that arts enrolment peaked in 2012. Dr Wylie asked whether arts enrolment has been reduced to allow for growth in other programs, whether it is the explicit policy of UBC Okanagan to reduce bachelor of arts enrolment to allow for expansion in other areas, and if so, whether this policy has been set at the request of the provincial government.

Dr. Buszard responded that the Okanagan campus is not reducing the number of seats available to bachelor of arts students to create seats in other programs. Today, the Okanagan campus remains below its funded target for domestic students and continues to take all qualified applicants. The term "forecast" is likely more accurate than "target" in this instance. The trend has been towards lower demand for bachelor of arts programs, so the University has been cautious in its projections, but there would be no hesitation in accepting a higher number of arts students than are targeted if there are a sufficient number of qualified applicants.

Dr Wylie asked whether, if UBC Okanagan reaches its complete enrolment targets, other programs would have to contract to allow for growth in bachelor of arts programs.

Dr. Ross responded that this is not the case. The target-setting process begins each year with a clean slate, beginning with projections about the anticipated volume of applications that will be received for each program.

Approved

NEW AND REVISED AWARDS

See Appendix A: Awards Report

Dr Legault identified two errors in the report circulated to Senate. On docket page 35 of 54, the rationale for item (g) lists the date of a College of Graduate Studies Council as October 19, 2016. Dr Legault proposed that the materials be amended to correctly list the date of that meeting as April 20, 2016. Similarly, on docket page 36 of 54, the date of the same College of Graduate Studies Council meeting is listed as October 19, 2016. Dr Legault proposed that this page also be amended to correctly list the meeting date as April 20, 2016.

Marianne Legault Greg Wetterstrand That Senate accept the new and revised awards as amended and forward them to the Board of Governors for approval; and that a letter of thanks be sent to the donors.

Dr Lalonde noted that the proposal to revise the description for the Graduate Dean's Thesis Fellowship including striking out the phrase "The College of Graduate Studies anticipates awarding twelve awards per year for a total of \$72,000", and asked if this change reflects an intention to reduce the total funding to be distributed under this fellowship.

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Dr Grant responded that there remains \$72,000 set aside for this award and that funding for the award will remain at this level until the College of Graduate Studies awards allocation increases.

Senator Trapara delivered a statement on behalf of graduate students. Senator Trapara noted that, as many non-Ph.D. and non-M.F.A. graduate students apply for the Graduate Dean's Thesis Fellowship, to restrict eligibility to Ph.D. and M.F.A. students is of concern to graduate students as it removes a funding opportunity previously available to other graduate students, without providing a replacement.

Dr. Grant agreed with the statement of Senator Trapara, noting that it would be preferable if there was more money available for graduate students. Dr. Grant noted that other graduate students remain eligible for University Graduate Fellowships.

Approved

Curriculum Committee

FEBRUARY CURRICUM REPORT

See Appendix B: Curriculum Report

Sean Lawrence Yves Lucet

That Senate approve and recommend to the Board of Governors for approval the new course brought forward from the Faculty of Arts and Sciences and the new course brought forward from the Faculty of Health and Social Development.

Dr Allen noted that the rationale provided for the proposed HEAL 100 indicates that the course will be "open as an elective to all students" and asked whether this course would be available to students in the Human Kinetics program as an elective.

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Dr Lawrence responded that the credit exclusion for HEAL 100, which precludes students from receiving credit for both HMKN 100 and HEAL 100 would prevent Human Kinetics students from taking HEAL 100 for credit, as they are required to

take HMKN 100.

Approved

Report from the University Librarian

Heather Berringer, Chief Librarian of the UBC Okanagan Library, thanked Senate for the opportunity to present the Library's 2016 accomplishments and priorities for 2017.

In 2016, 37,000 questions were answered at the Okanagan Library service point. This represents nearly one third of all service desk interactions in the UBC Library system. In last year's LibQUAL+ survey, approximately 86% of respondents rated the library's customer service as meeting or exceeding their expectations. In a survey of users of the Library's Writing and Research Services, over 96% of respondents indicated that they would use these services again.

UBC Library collections continue to move online. Approximately 82% of the library's collection is now digital, an increase of 2.2% over last year. Across the UBC system, print circulation is down 6% from last year, while visits to digital collections are up approximately 23%.

UBC Okanagan Library's own collections are also becoming increasingly digitized. Through a major reformatting project, over 600 VHS videocassettes deemed essential to teaching and research were converted to DVD. Two Okanagan Library special collections are in the process of being digitized, with nearly 2000 digital assets created. This year, the UBC Okanagan Library launched its first digital collection, the Archibald Murchie Collection, which contains photographs depicting industry and infrastructure development in the Cariboo and Similkameen regions of British Columbia.

In the area of student experience, the Okanagan Library's 2016 commitment to teaching and learning support included the expansion of the Academic Integrity Matters (AIM) program. The program received 44 referrals in its pilot year, including instructor, peer, and self-referrals. The program assists students in understanding the meaning of academic integrity, teaches how to properly credit and cite research, and provides strategies to ensure responsible academic writing. The Irving K. Barber School of Arts and Sciences has embedded AIM into its student success initiatives, and the Faculty of Critical and Creative Studies is taking steps to do the same in 2017.

2016 marked the completion of the Okanagan Library's Inclusive Technology Lab (ITL). This is a vital, supportive environment that empowers students with disabilities by giving them the tools they need to become effective learners. The ITL is unique in a BC Library setting for its combination of space, technology, and lending support services. The success of the ITL so far has inspired two anonymous donors to commit an additional \$80,000 in support of the ITL.

The Okanagan Library has continued to work closely with the Office of Research Services. This has included further development of the services underpinning the Research and Infrastructure Management Enterprises Services (RIMES) Portal, additional training opportunities for tools such as UNIWeb, and in the continued support of research data management, access to measures of global and local impact and cIRcle, UBC's institutional repository. The Library has also

begun a close collaboration with University Relations, assisting in identifying UBC Okanagan research stories to be shared with the world.

The UBC Innovation Library, the Library's space inside the Kelowna branch of the Okanagan Regional Library, thrived in 2016. The Innovation Library has a new, more visible space in the branch that allows it to better host workshops and teach classes. This year, the Innovation Library has already hosted community members from the Ki-Low-Na Friendship Society enrolled in UBC Okanagan's Downtown Education Project, and UBC Okanagan's 2017 Writer in Residence. With the addition of a co-operative education student from the School of Library, Archival, and Information Studies funded by the Irving K. Barber Learning Fund, the Library will be better able to reach out to local organizations such as Project Literacy to offer workshops and access to resources in the Innovation Library space. This year, the Innovation Library will also pilot a writing consultant available once per week as requested by mature students.

In 2016, the Library also hosted its most successful Leader in Residence program to date, welcoming Pilar Martinez, CEO of the Edmonton Public Library, and expanded its OneBook program. The Library also conducted a comprehensive records survey for the campus, developing a set of recommendations aimed at reducing risk, increasing compliance with statute, internal policy, and business need, and ensuring the long-term preservation of the campus' archival record.

The Library's priorities for 2017 include the following:

Assessing the needs of UBC Okanagan's growing international student body to ensure their needs are being met.

Re-imagining how front-line services are offered in response to research demonstrating that large, imposing desks are barriers for people with physical disabilities, create anxiety in students, and inhibit teaching and learning opportunities.

Continue conversations with colleagues in Advanced Research Computing to develop seamless experiences for researchers who need to manage research data and create and curate digital assets.

Engage in dialogue about how to manage institutional records, whether paper-based or electronic. An Okanagan-based face to the institutional Records Management Office will be created to help organize units and implement a university archives program on the Okanagan campus to ensure the long-term preservation of the campus history.

In the summer of 2017, the Okanagan Library will formally launch the first phase of the Okanagan History Regional Digitization program. This is a donor-funded initiative that will allow the Library to deploy student digitization teams on-site with portable technology to local community archives, museums, historical societies, and other organizations to digitize priority collections.

The biggest challenge facing the Library is the currency exchange rate, which has reached crisis-levels. For every penny the Canadian dollar drops, the Library system loses nearly \$100,000.00

in purchasing power. This impacts the growth of the Library's collections and its ability to support new programs, increasing student enrolment, and new research funding secured by Faculty members. In general, electronic collections are subscribed to in large packages. This makes it difficult to reduce spending, as the per-title cost of subscriptions is much lower as part of a package as compared to subscribing individually to a publication.

In order to address this issue, the Library tries to balance the research, teaching, and learning materials needed by faculties with the external factors impacting its collections budget. The Library is working with its Vancouver colleagues to consult with faculties and prioritize materials that support curriculum, teaching, and research needs for monographs. A greater emphasis needs to be placed on purchasing large, multi-disciplinary, perpetual access e-book packages, negotiating with library resource vendors, and prioritizing resources at the Faculty level. A long-term resolution of this issue will require strategic coordination between institutions with involvement beyond that of University Libraries.

On a more positive note, the biggest news of 2016 was the funding announcement that has allowed the University to move forward with construction of the Teaching and Learning Centre, which will be connected to the existing Library. The project is scheduled to open in Spring 2018. The 60,000 square foot addition will include a 400 seat classroom, a variety of options for collaborative and independent study and learning, a graduate student commons, a digital media centre, and a new special collections and archive vault facility for long-term preservation of materials.

Nominating Committee

APPOINTMENTS TO THE PRESIDENT'S ADVISORY COMMITTEE FOR THE SELECTION OF A VICE-PROVOST INTERNATIONAL

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Daniel Keyes Cynthia Mathieson That Dr Suzanne Gott, Associate Professor, Faculty of Creative and Critical Studies, and Dr Mike Deyholos, Professor, Faculty of Arts and Sciences (also known as the Barber School of Arts and Sciences), be selected to serve on the President's Advisory Committee for the selection of a Vice-Provost International.

Dr. Johnson asked whether the advisory committee would be involved in the selection of a vice-provost for the Vancouver campus or the Okanagan campus.

Dr. Buszard responded that the vice-provost would be based on the Vancouver campus and report to the UBC Vancouver Provost, but would have some system-wide responsibility.

Dr. Johnson asked that future materials referring to the Provost be specific as to campus.

Approved

Other Business

Dr. O'Leary advised that he would like to ask the Dean of the College of Graduate Studies about the current funding model for Ph.D. students, and suggest that mandatory minimum funding for doctoral students be considered.

Dr. Buszard suggested the topic be brought to the appropriate Senate Committee and then brought back to Senate for discussion by that Committee.

IN CAMERA – HONORARY DEGREE

Adjournment

There being no further business, the meeting was adjourned at 5:11 pm.

Appendix A: Awards Report

New Awards:

a) Proposed Award Title: Morag Margaret Broughton Memorial Bursary in Nursing

A \$1,000 bursary is offered to a first-year student in the School of Nursing in the Faculty of Health and Social Development at the University of British Columbia, Okanagan campus. This award, funded by family and friends, is in memory of Morag Margaret Broughton and in recognition of her career as a registered nurse. Preference is given to a student with assessed financial need and who has one or more dependents. (First award available for the 2017 Winter Session)

b) Proposed Award Title: Frederick William (Bill) Broughton Memorial Bursary in Engineering

A \$1,000 bursary is offered by the family, to a first- or second-year student in the School of Engineering in the Faculty of Applied Science at the University of British Columbia, Okanagan campus. The award is given in memory of Frederick William (Bill) Broughton in recognition of his career as a Mechanical Engineer. The bursary is given to a student with assessed financial need. (First award available for the 2017 Winter Session)

c) Proposed Award Title: Scholarship in Philosophy, Politics and Economics

Two scholarships of \$2,500 each are offered by Dr. Roger Gale – one to a student who has completed his/her second year and one to a student who has completed his/her third year in the Philosophy, Politics and Economics (PPE) program in the Irving K. Barber School of Arts and Sciences at the University of British Columbia, Okanagan campus. Preference will be given to a student who has demonstrated academic excellence. (First awards available for the 2017 Winter Session)

d) Proposed Award Title: Bursary in Philosophy, Politics and Economics

Two bursaries of \$2,500 each are offered by Dr. Roger Gale – one to a student who has completed his/her second year and one to a student who has completed his/her third year in the Philosophy, Politics and Economics (PPE) program in the Irving K. Barber School of Arts and Sciences at the University of British Columbia, Okanagan campus. Preference will be given to a student who has demonstrated assessed financial need. (First awards available for the 2017 Winter Session)

e) Proposed Award Title: Doug and Ruth Pearce Engineering Capstone Prize

A \$500 prize is offered by Doug and Ruth Pearce in memory of Dr. Spiro Yannacopoulos to the team of fourth-year students in the School of Engineering in the Faculty of Applied Science at the University of British Columbia, Okanagan campus, who place first in the Capstone Design Project course. (First award available for the 2016 Winter Session)

f) Proposed Award Title: Dorothy Anna Proudfoot Memorial Scholarship in Nursing

A \$7,000 scholarship has been endowed by the estate of Dorothy Anna Proudfoot for a graduate student enrolled in the Master of Science in Nursing program in the School of Nursing at the University of British Columbia, Okanagan campus. Preference will be given to the student with the

highest admission GPA. The award is made on the recommendation of the College of Graduate Studies in consultation with the School of Nursing. Dorothy Proudfoot (1929-2015) had an intriguing nursing career which spanned many decades, starting in Humboldt, Saskatchewan, and ending in long-term care in Kelowna, BC. She flew with the Saskatchewan Air Ambulance and served as a nurse in Japan during the Korean War. Dorothy worked in community health for many years in Kelowna and she was also involved in home nursing, long-term care assessment, and administration. (First award available for the 2017 Winter Session)

Revised Award:

(Previously-approved awards with changes in terms or funding source):

g) Existing description: Graduate Dean's Thesis Fellowship

The Graduate Dean's Thesis Fellowship is a merit-based fellowship that is awarded to full-time, thesis-based **graduate MFA and PhD** students who are approaching their final year and are focusing on the completion of their thesis or dissertation. This scholarship is intended to provide financial support while students are engaged in the final writing stages of their graduate programs.

The award value is \$6,000. The College of Graduate Studies anticipates awarding twelve awards per year for a total of \$72,000. Students may apply for this funding three two times per year. Graduate programs may submit up to two nominations per award cycle to the College of Graduate Studies. The College of Graduate Studies Scholarship and Awards Committee will review and rank nominations received from graduate programs and provide recommendations to the Dean, who will determine the final awardees.

(Revised award effective session 2017W)

Amended Description:

The Graduate Dean's Thesis Fellowship is a merit-based fellowship that is awarded to full-time, thesis-based MFA and PhD students who are approaching their final year and are focusing on the completion of their thesis or dissertation. This scholarship is intended to provide financial support while students are engaged in the final writing stages of their graduate programs.

The award value is \$6,000. Students may apply for this funding two times per year. Graduate programs may submit up to two nominations per award cycle to the College of Graduate Studies. The College of Graduate Studies Scholarship and Awards Committee will review and rank nominations received from graduate programs and provide recommendations to the Dean, who will determine the final awardees.

(Revised award effective session 2017W)

Rationale:

The proposed changes to the Graduate Dean's Thesis Fellowship awarding process are the outcome of multiple conversations with staff, faculty, and faculty administrators, culminating in a meeting of College of Graduate Studies Council on October 19, 2016, in which these changes were approved by a formal vote of the members present. A thrice-per-annum award cycle weighed too heavily on CoGS staff resources and placed unjustifiable demands on supervisors of graduate students and on adjudicators of the award process. Two award cycles are more consistent with the limited amount of funding available for this award, available UBCO staff and faculty resources and with the intention of the award. The total funding amount for this award will remain the same: it will simply be allocated twice a year, and only among PhDs and MFAs.

In keeping with the Canada-wide emphasis at research universities on promoting first and foremost the PhD or terminal disciplinary degrees such as the MFA, the College of Graduate Studies Council proposes (by unanimous vote) to make the limited funds available for this award accessible only to Ph.D. students and MFA students engaged in the final writing stages of their graduate programs.

A note on the "terminal" MFA: some would argue (and did at the College of Graduate Studies Council meeting on October 19, 2016) that an MFA is not necessarily terminal. A few Universities in Canada offer PhD degrees in MFA areas. At many universities and Canada and elsewhere, however, the MFA remains a terminal disciplinary degree, which is the case at UBC Okanagan. Accordingly, the College of Graduate Studies Council found this argument to be persuasive and are therefore treating the MFA as a terminal degree for purposes of this award.

A note on the title of the award: "Graduate Dean" is not the official title of the Dean of the College of Graduate Studies, but it is the commonly used short-hand title, and much less cumbersome for the title of this award than the "official" language would be. Everyone recognizes its meaning.

Appendix B: Curriculum Report

FROM THE FACULTY OF ARTS AND SCIENCES

New Course:

ECON 321 (3) Experimental Economics

FROM THE FACULTY OF HEALTH AND SOCIAL DEVELOPMENT

New Course:

HEAL 100 (3) Introduction and Principles of Health and Wellbeing



Fiscal Environment

- Domestic tuition capped at 2%
- Aging faculty due to end of mandatory retirement, funding pressures
- Provincial restriction on use of consolidated reserves
- Research funding becoming more competitive
- Growing international enrolment

Strategy

- Enhance programming that supports core academic mission
- Administrative best-practices focused on outcomes
- Align fundraising activities towards University's priorities
- Position UBC for research funding success
- Continual evaluation of fees





Funding Context

- Balanced operating budget
- Government grant cuts from FY14 to FY16. Annual budget impact of \$1.9m, cumulative effect of \$7.4m
- Impact of recent retroactive faculty settlement in FY16 \$2.0m, with a recurring impact of \$1.6m
- Domestic enrolment rate increase of 2% per year, and tuition rate increase of 2%
- Faculties budgeting 15% FTE growth and 15% tuition growth in International Tuition; mitigating risk by planning 5% FTE growth for central unit budgets
- International tuition growth of \$6.4m is allocated as follows:
 - \$2.2m to the Faculties
 - \$1.6m to the Excellence Fund
 - \$0.5m to Student Financial Aid
 - \$1.3m held back as tuition retained risk (10% FTE growth)
 - \$0.8m to central support services
- Excellence Fund allocation of \$0.75m in FY17 and \$1.6m in FY18 for total funding of \$2.3m







UBC - Consolidated Perspective

Operating Revenue		UBC Vancouver UBC Okanagan						UBC Total				
(in \$millions)	Actual Fiscal 15/16	Forecast Fiscal 16/17	Budget Fiscal 17/18	Budget vs. Forecast	Actual Fiscal 15/16	Forecast Fiscal 16/17	Budget Fiscal 17/18	Budget vs. Forecast	Actual Fiscal 15/16	Forecast Fiscal 16/17	Budget Fiscal 17/18	Budget vs. Forecast
Provincial government grants	522	530	543	12	67	67	68	1	589	598	611	. 13
Undergraduate tuition												"
Domestic	182	188	193	5.5	32	. 33	34	1	213	220	227	7
International	170	207	247	40.2	19	24	30) 6	189	231	277	47
Graduate tuition	60	65	71	6.1	4	4	4		64	69	75	6
Investment income	41	44	44		-	-	-	-	41	. 44	44	,
Research revenue	40	39	36	(2)	1	. 1	. 1	. ()	41	. 40	37	' (2)
Business revenue	18	22	23	1	1	. 1	. 1	,	19	23	24	1
Land development proceeds	17	19	22	. 3				-	17	19	22	3
Subtotal	1,050	1,113	1,179	65	123	130	139	9	1,173	1,243	1,318	3 74
Faculty revenue	177	182	173	(8)	1	1	1	. ()	178	183	174	(9)
Central support unit revenue	358	373	392	19	9	9	10	1	367	382	402	20
Total Operating Revenue	1,585	1,668	1,744	76	132	140	149	10	1,717	1,808	1,894	86

Student Enrolment

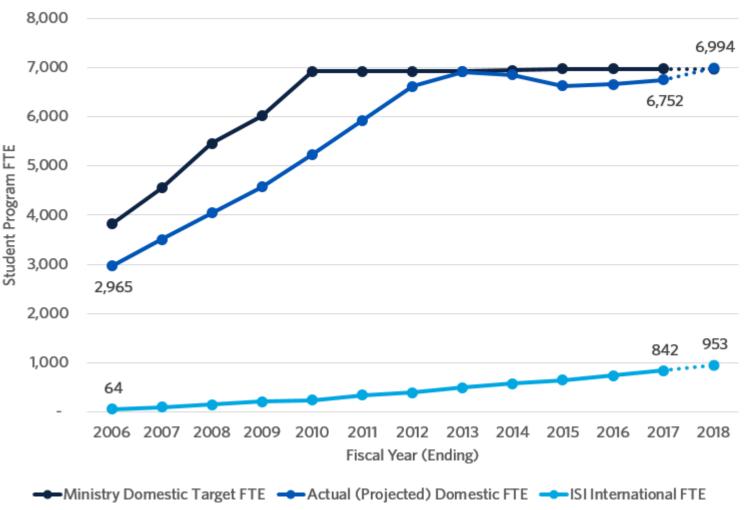
Student FTE		16/17		17/18 (Projected)			
	Vancouver	Okanagan	Total UBC	Vancouver	Okanagan	Total UBC	Chang
Undergraduate	_						
Domestic	30,901	6,140	37,041	30,917	6,290	37,207	0.4
International	8,046	846	8,892	8,746	953	9,699	9.1
Total	38,947	6,986	45,933	39,663	7,243	46,906	2.1
Graduate	7,851	670	8,521	7,852	704	8,556	0.4
Total	46,798	7,656	54,454	47,515	7,947	55,462	1.9





UBCO – Student Enrolment History

Actual and Projected Student Program FTE Summary



Historical Context

(\$m)	Fiscal All	ocations¹			
	12/13 Actuals	17/18 Budget	Fiscal (\$)	% of Total	Growth (%)
Faculties	55.2	71.6	16.4	55.7%	29.7%
Provost and Vice Principal	10.5	12.9	2.4	8.1%	22.8%
Vice Principal Research	1.1	3.6	2.5	8.6%	230.9%
Deputy Vice-Chancellor	2.7	3.1	0.5	1.5%	16.7%
AVP Finance and Operations	16.8	20.2	3.4	11.4%	20.1%
AVP Students	4.8	6.3	1.5	5.2%	31.9%
Development and Alumni Engagement	1.4	1.7	0.3	1.1%	23.6%
Human Resources	1.2	1.3	0.1	0.5%	11.7%
Contributions to UBCV ²	2.2	3.5	1.3	4.4%	59.1%
Campus-wide Expenses ³	3.4	3.1	(0.3)	(1.2%)	(9.9%)
Student Financial Aid	7.1	8.4	1.3	4.5%	18.7%
Total Funding Allocations	106.4	135.9	29.5	100.0%	27.7%



¹ Fiscal allocations exclude departmental revenues

² Contributions to UBCV exclude exchange and application fees

³ Campus-wide expenses exclude salary provision and contingency balances

2017/18 OPERATING BUDGET ALLOCATIONS (\$MILLIONS)

Fiscal 2017/18 Outlook	Recurring	One-time	Total
Incremental revenue			
Tuition	8.5	-	8.5
Provincial Grant	1.2	(0.1)	1.1
Others	0.1		0.1
Total incremental revenue	9.8	(0.1)	9.7
Less:			
Faculty share of tuition growth	(3.4)	-	(3.4)
Excellence Fund	(1.6)	-	(1.6)
International Student Financial Aid (SFA)	(0.5)	-	(0.5)
General Wage Increase (GWI) funding	(1.3)	0.2	(1.1)
Incremental revenue	3.0	0.1	3.1
International tuition retained risk - 2017/18	(1.3)	-	(1.3)
International tuition retained risk - 2016/17	0.8	-	0.8
Redistribution of unspent administrative surplus - current year	-	0.5	0.5
Redistribution of unspent administrative surplus - prior years	-	1.6	1.6
Total available for allocations	2.5	2.2	4.7
Proposed allocations			
Prior Commitments	0.3	0.1	0.4
Strategic Investments			
Teaching and learning experience	0.4	-	0.4
Research excellence	0.3	0.5	0.8
Student engagement	0.2	0.5	0.7
Faculty and staff engagement	0.2	-	0.2
Innovation and service enhancements	0.3	0.3	0.7
Community engagement	0.2	-	0.2
Total Strategic Investments	1.7	1.3	3.0
Risk Areas	-	0.6	0.6
Maintaining Core Services	0.5	0.3	0.8
Total proposed allocations	2.5	2.2	4.7
Net of revenues and allocations (balanced)	0	0	0







OPERATING FUND (\$MILLIONS)

	Forecast ¹	Plan	Increase/
	2016/17	2017/18	(Decrease)
Revenues			
Provincial government	67.3	68.3	1.0
Undergraduate credit domestic tuition	32.7	34.2	1.5
International undergraduate tuition	24.0	30.4	6.4
Graduate tuition	3.9	4.1	0.2
Research revenues	0.9	0.9	-
Business revenues	1.1	1.1	-
Faculty revenues	0.9	0.8	(0.1)
Central support unit revenues	8.9	9.6	0.7
Total Operating revenues	139.7	149.4	9.7





¹ Forecast is based on projection as at Q3 FY17 forecast.

OPERATING FUND (\$MILLIONS)

	Forecast ¹	Plan ²	Increase/
	2016/17	2017/18	(Decrease)
Allocations and unit revenues 3			
Faculties	69.9	72.4	2.5
Student Financial Aid	7.4	8.4	1.0
Provost and Vice-Principal Academic	10.8	11.5	0.7
Excellence Fund	0.3	1.4	1.1
Deputy Vice-Chancellor and Principal	3.0	3.1	0.1
Vice-Principal Research	3.1	3.8	0.7
Finance and Operations	25.4	26.8	1.4
Students	8.6	9.0	0.4
Academic	0.1	0.2	0.1
Development and Alumni Engagement	1.7	1.7	-
Human Resources	1.3	1.4	0.1
Campus wide expenses	4.2	4.1	(0.1)
Contribution to UBCV	3.9	4.3	0.4
International Tuition Retained Risk ⁴		1.3	1.3
Total Allocations and unit revenues	139.7	149.4	9.7





¹ Forecast is based on projection as at Q3 FY17 forecast

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

 $^{^{\}rm 3}$ Funding allocations reflect fiscal funding allocations and departmental revenues.

⁴ Faculties have planned 15% FTE Growth for International Undergraduate. Limited FTE growth, for purposes of administrative unit allocations to 4%.

(\$000's)		Fiscal Fu	% Change				
	13/14	14/15	15/16	16/17	17/18 Plan ²	FY17 - FY18	FY14 - FY18
Faculties ³	62,314	62,908	63,919	68,911	71,625	4%	15%
Arts and Sciences	25,427	25,637	25,989	27,944	29,279	5%	15%
Applied Science	7,487	7,521	8,681	10,067	11,270	12%	51%
Creative and Critical Studies	9,599	9,389	9,171	9,508	9,934	4%	3%
Education	4,166	4,214	3,410	3,485	3,217	(8%)	(23%)
Graduate Studies	506	664	799	1,120	892	(20%)	76%
Health and Social Development	10,292	10,877	10,772	11,294	11,635	3%	13%
Management	3,971	4,113	4,605	4,360	4,602	6%	16%
Salary and benefit provision	868	492	492	727	492	(32%)	(43%)
Faculty Initiatives Fund	-	-	-	405	305	(25%)	-
Provost & Vice Principal	9,020	9,908	9,919	10,938	12,691	16%	41%
Provost Office	918	1,389	1,275	1,662	2,184	31%	138%
Excellence Fund	-	-	-	304	1,350	344%	-
Centre for Teaching and Learning	796	814	803	822	906	10%	14%
Okanagan PAIR	243	293	278	439	307	(30%)	26%
Library	3,440	3,520	3,576	3,604	3,751	4%	9%
International Student Initiative (ISI)	832	808	780	841	860	2%	3%
Enrolment Services	2,791	3,084	3,207	3,267	3,333	2%	19%
Vice Principal Research	963	1,785	2,517	2,989	3,640	22%	278%
Vice Principal and Research Office	149	284	827	1,039	1,541	48%	937%
Office of Research Services	507	569	509	614	597	(3%)	18%
University Industry Liasion Office	185	158	232	229	227	(1%)	23%
Institute for Healthy Living and Chronic	. 30	.50				(.70)	_5,0
Disease Prevention	64	64	70	90	69	(23%)	9%





¹ Fiscal funding allocations exclude departmental revenues.

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

³ Faculty allocations for 16/17 subject to final enrolments under tuition allocation model

(\$000's)		Fiscal Fu	% Change				
	13/14	14/15	15/16	16/17	17/18 Plan ²	FY17 - FY18	FY14 - FY18
Braes Institute (SARAHS)	-	50	51	59	53	(10%)	-
Okanagan Sustainability Institute	(29)	56	1	-	-	-	(100%)
Animal Care	88	150	206	228	147	(35%)	68%
STAR	-	454	517	675	531	(21%)	-
Research Infrastructure Institute for Socio Economic Development				-	418	-	-
(ISED)			50				
Community Engagement (ICER)	-	-	54	- 55	- 57	4%	-
Deputy Vice-Chancellor	2,431	2,428	2,603	2,996	3,149	5%	30%
Deputy Vice Chancellor's Office	1,331	1,279	1,287	1,279	1,332	4%	0%
University Relations	1,101	1,149	1,286	1,718	1,818	6%	65%
Centennial Fund	-	-	30	-	-	-	-
AVP Finance and Operations	17,528	17,742	17,996	19,444	20,171	4%	15%
AVP Finance and Operations Office	559	558	407	406	411	1%	(27%)
Finance	1,428	1,720	1,728	1,726	1,789	4%	25%
Campus Operations and Risk Management	432	566	570	640	580	(9%)	34%
Campus Mail	177	194	200	182	199	9%	12%
Security	1,489	1,404	1,414	1,445	1,453	1%	(2%)
Project Services	-	-	-			-	-
Facilities	5,004	5,041	5,156	5,900	5,871	(0%)	17%
Utilities	2,879	2,514	2,514	2,514	2,514		(13%)
Campus Planning and Development	-	360	393	688	702	2%	-
Sustainability	400	355	506	448	501	12%	25%
IT, Media and Classroom Services	5,159	5,030	5,107	5,495	6,151	12%	19%





¹ Fiscal funding allocations exclude departmental revenues.

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

(\$000's)		Fiscal F	% Change				
	13/14	14/15	15/16	16/17	17/18 Plan ²	FY17 - FY18	FY14 - FY18
AVP Students	6,067	6,025	5,811	5,946	6,331	6%	4%
AVP Students Office	287	287	289	290	292	1%	2%
Athletics and Recreation	1,537	1,611	1,514	1,515	1,522	0%	(1%)
Community Service Learning	162	174	173	179	182	1%	12%
General Operating - AVP Students	591	270	119	149	531	256%	(10%)
Aboriginal Program and Services	371	389	409	549	517	(6%)	39%
Disability Resource Centre	415	400	616	536	544	1%	31%
Campus Life	526	613	522	513	528	3%	0%
Career and Co-op Services	46	73	60	115	116	1%	153%
Student Services	290	-	-	-	-	-	(100%)
Student Development	247	217	129	125	96	(23%)	(61%)
Learning Centre	214	218	167	154	160	4%	(25%)
Health and Wellness	630	793	803	786	791	1%	26%
Academic Advising	389	536	526	525	587	12%	51%
International Student Services	288	380	403	439	440	0%	53%
Go Global	74	64	82	72	28	(62%)	(63%)
VP Academic	170	98	94	126	200	58%	18%
Equity Office	170	98	94	126	200	58%	18%
Development and Alumni Engagement	1,544	1,568	1,641	1,696	1,729	2%	12%
Alumni	222	253	270	281	293	4%	32%
Development	1,322	1,315	1,372	1,414	1,435	1%	9%





¹ Fiscal funding allocations exclude departmental revenues. ² Plan is based on preliminary allocations, pending Board approval.

(\$000's)		Fiscal Fu	% Change				
	13/14	14/15	15/16	16/17	17/18 Plan ²	FY17 - FY18	FY14 - FY18
Human Resources	1,045	1,135	1,167	1,352	1,335	(1%)	28%
Human Resources	1,045	1,135	1,167	1,352	1,335	(1%)	28%
Student Financial Aid	7,181	7,202	7,319	7,381	8,426	14%	17%
Student Financial Aid - Graduate	2,110	2,037	2,048	1,764	2,105	19%	(0%)
Student Financial Aid Undergraduate -							
Domestic	3,441	3,499	3,369	3,381	3,597	6%	5%
Student Financial Aid Undergraduate -							
International	971	1,066	1,302	1,635	2,124	30%	119%
Go Global	200	200	200	200	200		
Work Study/Work Learn	460	400	400	400	400		(13%)
Campus-wide Expenses	12,116	10,576	8,330	8,148	8,350	2%	(31%)
Benefits	386	355	355	355	355	(0%)	(8%)
Contingency	763	1,874	1,377	1,028	868	(16%)	14%
Capital contingency	6,500	2,500	-	-	-	-	(100%)
Contributions to UBCV	2,699	3,151	3,817	3,921	4,267	9%	58%
Debt servicing	3,424	2,613	2,701	2,701	2,701	0%	(21%)
Salary increase provision	(887)	(25)	-	118	113	(4%)	(113%)
Other	117	5	25	25	36	43%	(70%)
Int'l allocation provision	(887)	103	55	-	11	-	(101%)
International Tuition Retained Risk	-	-	-	-	1,330	-	-
Total Funding Allocations	120,379	121,374	121,317	129,928	138,977	7%	15%





¹ Fiscal funding allocations exclude departmental revenues.

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





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

30 March 2017

To: Okanagan Senate

From: Admissions and Awards Committee

Re: Revised Award - Robert B. Harris Award in Management (approval)

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

Motion: That Senate accept the revised award as listed and forward it to the Board of Governors for approval.

Existing description (2008):

Award Title: Robert B. Harris Scholarship Award in Management

Scholarships totalling \$4,900 have been endowed A \$4,000 award is offered by Robert B. Harris for students to a student entering fourth-year in the Faculty of Management at the University of British Columbia, Okanagan campus. The award will be given to a student who shows great promise as a future business leader through demonstrated academic strength, an exceptional work ethic, and classroom leadership. Preference will be given to the student who has also shown significant involvement in campus activities. The awards are made on the recommendation of the Faculty.

Proposed Award Title: Robert B. Harris Award in Management Amended Description:

A \$4,000 award is offered by Robert B. Harris to a student entering fourth-year in the Faculty of Management at the University of British Columbia, Okanagan campus. The award will be given to a student who shows great promise as a future business leader through demonstrated academic strength, an exceptional work ethic, and classroom leadership. Preference will be given to the student who has also shown significant involvement in campus activities. The awards are made on the recommendation of the Faculty.

Rationale: Donor wishes to focus on a fourth year student.

Respectfully submitted,

Dr. Marianne Legault 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

13 March 2017

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 11 new courses, one revised course and two associated discontinued courses brought forward from the Faculty of Applied Science, one new course brought forward from the Faculty of Creative and Critical Studies, and two revised programs and three new courses brought forward by the Faculty of Arts and Sciences.

- a. From the Faculty of Applied Science
 - i. ENGR 432 (3) Infrastructure Management II (new course)
 - ii. ENGR 431 (3) Infrastructure Management (discontinued course)
 - iii. ENGR 491 (3) Computational Fluid Dynamics (new course)
 - iv. ENGR 492 (3) Finite Element Methods (new course)
 - v. ENGR 582 (3) Finite Element Methods (revised course)
 - vi. ENGR 493 (3) Introduction to Aerodynamics and Aircraft Design (new course)
 - vii. ENGR 494 (3) Autonomous Vehicle Technology (new course)
 - viii. ENGR 535 (3) Autonomous Vehicle Technology (new course)
 - ix. ENGR 495 (3) Tissue Engineering (new course)
 - x. ENGR 519 (3) Tissue Engineering (new course)
 - xi. ENGR 567 (3) Passive Microwave Circuits (new course)
 - xii. ENGR 479 (3) Measurement Principles in Thermal-Fluids (new course)

- xiii. ENGR 498 (3/6)d Special Topics in Engineering (new course)
- xiv. ENGR 449 (3) Special Topics in Civil Engineering (discontinued course)
- b. From the Faculty of Creative and Critical Studies
 - i. SPAN 328 (3) The Spanish Inquisition, from Anti-Judaism to Persecution (new course)
- c. From the Faculty of Arts and Sciences
 - i. BIOC 494 (3) Biotechnology Laboratory I: DNA Manipulation (new course)
 - ii. BIOC 495 (3) Biotechnology Laboratory II: Gene Expression (new course)
 - iii. Major in Biochemistry and Molecular Biology Program Requirements (revised program)
 - iv. Major in Microbiology Program Requirements (revised program)
 - v. EESC 390 (3) Geological Field Mapping (new course)

For the Committee,

Dr. Peter Arthur Chair, Curriculum Committee

Curriculum Proposal Form New/Change to Course/Program – Okanagan campus

Category: 1

Faculty/School: School of Engineering **Date:** 20161122

Faculty/School Approval Date: 2017.01.09 Phone: 250.807.9643
Effective Session: 2017W Email: yang.cao@ubc.ca

Type of Action: Deletion of Course and Proposal of New Course

Rationale: ENGR 431 was moved to third year as ENGR 331 Infrastructure Management I for 2016W. In 2016W, ENGR 331 and ENGR 431 ran concurrently. This new course, ENGR 432 Infrastructure Management II, is a fourth year elective which builds on ENGR 331.

Proposed Academic Calendar Entry:

N/A – discontinue ENGR 431

Proposed Academic Calendar Entry:

ENGR 432 (3) Infrastructure Management II

Integrated asset management, uncertainty quantification, condition assessment and performance modeling, in-service monitoring and risk-based evaluation, life cycle cost and benefits analysis, prioritization and optimization, advanced GIS implementation.

[3-0-0]

Prerequisite: All of ENGR 303, ENGR 305,

ENGR 310, ENGR 331.

Draft Academic Calendar URL:

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

Present Academic Calendar Entry:

ENGR 431 (3) Infrastructure Management Introduction to asset management, municipal infrastructure systems, performance and prioritization measures, data management, life cycle costing, decision support tools, integrated approach. Credit will not be granted for both ENGR 431 and ENGR 531. [3-0-0] Prerequisite: All of ENGR 303, ENGR 305, ENGR 330.

Present Academic Calendar Entry:

N/A – create new course ENGR 432

Curriculum Proposal Form New/Change to Course/Program – Okanagan campus

Category: 1

Faculty/School: School of Engineering

Dept./Unit: School of Engineering

Faculty/School Approval Date: 2017.01.09 Effective Session: 2017W

Type of Action: Creation of New Course

Rationale: Computational fluid dynamics (CFD) uses computers to simulate heat and fluid flows, and is becoming an integral part of many industries, including automotive, aerospace, oil/gas, defense, mining, and health. Engineers are increasingly expected to be familiar with CFD tools. However, there are currently no undergraduate classes focused on CFD. This course will provide an overview of the CFD theory and methods involved in simulating heat and fluid flow. The course will involve an innovative "flipped classroom" approach in which traditional lectures are partially replaced with in-class exercises using open-source CFD software tools.

Draft Academic Calendar URL:

Date: 20161122

Phone: 250.807.9643

Email: yang.cao@ubc.ca

Contact Person: Dr. Yang Cao

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

Proposed Academic Calendar Entry:

ENGR 491 (3) Computational Fluid Dynamics

Computational fluid dynamics theory and methods for the numerical simulation of heat and fluid flow.

Governing equations, meshing strategies and mesh requirements, finite difference methods, finite volume methods, solution of algebraic systems of equations, compressible flows, turbulence modelling. [3-0-0]. Prerequisite: ENGR 310.

Present Academic Calendar Entry:

N/A

Curriculum Proposal Form New/Change to Course/Program – Okanagan Campus

Category: 1

Faculty/School: School of Engineering Date: 20161122

Type of Action: New undergraduate course (to be cross-listed with the existing graduate level of the

course: ENGR 582).

Rationale: This new undergraduate 4th-year *elective* course will be beneficial for Mechanical/Civil/Electrical Engineering students to learn and apply finite element method (FEM) for numerically solving complex design problems; particularly those related to stress analysis, heat transfer, basic fluid mechanics and electro-mechanical systems. To ensure applicability of the course material to students' specific fields of interest, multi-disciplinary design and optimization projects will be defined and solved in groups, composed of undergraduate and graduate students. Through the latter interaction, undergraduate students will also have the opportunity to further comprehend and practice complex mathematical concepts covered during the lectures.

Proposed Academic Calendar Entry:

ENGR 492 (3) Finite Element Methods

Finite Element Discretization, Direct Stiffness
Method, Numerical Solution of Large
Deformations, Formulation of Finite Elements,
Auxiliary Equations, Thermomechanical Analysis,
Computer Implementation of the Finite Element
Methods, Case Studies in Material Forming and
Multi-Physics. Credit will be granted for only one
of ENGR 492 or ENGR 582. [3-0-0].

Prerequisite: APSC 256

Draft Academic Calendar URL:

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

Present Academic Calendar Entry:

N/A

Present Academic Calendar Entry:

ENGR 582 (3) Finite Element Method

Finite element discretization, direct stiffness method, numerical solution of large deformations, formulation of finite elements, auxiliary equations, thermomechanical analysis. Computer implementation of finite element methods, case studies in metal forming, and multi-physics. Credit will be granted for only one of ENGR 492 or ENGR 582.

Present Academic Calendar Entry:

ENGR 582 (3) Finite Element Method

Finite element discretization, direct stiffness method, numerical solution of large deformations, formulation of finite elements, auxiliary equations, thermomechanical analysis. Computer implementation of finite element methods, case studies in metal forming, and multi-physics.

Category: 1

Faculty/School: School of Engineering

Dept./Unit: School of Engineering

Faculty/School Approval Date: 2017.01.09 Effective Session: 2017W

Type of Action: Creation of New Course

Date: 20161122

Contact Person: Dr. Yang Cao

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

Rationale: Aerodynamics and aircraft design is currently absent from the undergraduate curriculum despite significant interest among students. This course aims to introduce key elements in applied aerodynamics in the context of the conceptual design process for fixed-wing aircraft. The course will focus on estimating the aircraft weight, fuel load, lift, thrust, airfoil and wing specification, engine selection and sizing, and structural loads. The design approach is applied to an individual design project in which students develop their own aircraft concepts to achieve an assigned set of requirements.

Proposed Academic Calendar Entry:

ENGR 493 (3) Introduction to Aerodynamics and Aircraft Design

Aircraft conceptual design: methods for estimating aircraft weight, fuel load, lift, thrust, airfoil and wing specification, engine selection and sizing, and structural loads. Introductory aerodynamics of airfoils and wings. [3-0-0]. Prerequisite: ENGR 310.

Draft Academic Calendar URL:

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

Present Academic Calendar Entry:

Category: 1

Faculty/School: School of Engineering

Faculty/School Approval Date: 2017.01.09 Phone: 250.807.9643
Effective Session: 2017W Email: yang.cao@ubc.ca

Type of Action: Creation of New Cross-listed Courses

Rationale: This new course is added to provide an introduction to autonomous vehicle technology including unmanned aerial vehicles (UAVs) and automated vehicles at both undergraduate and graduate levels in the School of Engineering, Faculty of Applied Science. The course will prepare the students for the growing job market of the emerging technologies in automotive and aerospace industries.

Draft Academic Calendar URL:

Date: 20161122

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

Proposed Academic Calendar Entry:

ENGR 494 (3) Autonomous Vehicle Technology

Autonomous navigation: perception, localization and mapping, motion planning, and motion control; and applications to unmanned aerial vehicles (UAVs), automated vehicles and self-driving cars.

Credit will be granted for only one of ENGR 494 or ENGR 535. [3-0-0].

Prerequisite: ENGR480

ENGR 535 (3) Autonomous Vehicle Technology

Autonomous navigation: perception, localization and mapping, motion planning, and motion control; and applications to unmanned aerial vehicles (UAVs), automated vehicles and self-driving cars. Credit will be granted for only one of ENGR 494 or ENGR 535.

Present Academic Calendar Entry:

Category: 1

Faculty/School: School of Engineering

Faculty/School Approval Date: 2017.01.09 Phone: 250.807.9643
Effective Session: 2017W Email: yang.cao@ubc.ca

Type of Action: Creation of New Cross-listed Courses

Rationale: This new course is added to introduce tissue engineering to both undergraduate and graduate-level students in the School of Engineering, Faculty of Applied Science. The course will provide fundamental understandings of materials, fabrication methods, and applications of artificial tissue scaffolds for students who are interested in emerging biomanufacturing and biofabrication research area.

Proposed Academic Calendar Entry:

ENGR 495 (3) Tissue Engineering

Fundamentals of cell biology; extracellular matrix, receptors, and cell-cell and cell-matrix interactions at both the theoretical and experimental levels; effects of physical, chemical, and electrical stimuli on cell function; tissue structure and function and the clinical need for tissue repair; scaffold design and processing for tissue engineering. Credit will be granted for only one of ENGR 495 or ENGR 519. [3-0-0]

Prerequisite: Fourth-year standing.

ENGR 519 (3) Tissue Engineering

Fundamentals of cell biology; extracellular matrix, receptors, and cell-cell and cell-matrix interactions at both the theoretical and experimental levels; effects of physical, chemical, and electrical stimuli on cell function; tissue structure and function and the clinical need for tissue repair; scaffold design and processing for tissue engineering. Credit will be

Draft Academic Calendar URL:

Date: 20161122

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

Present Academic Calendar Entry:

granted for only one of ENGR 495 or ENGR 519.	

Category: 1

Faculty/School: Applied Science Date: 20161215

Faculty/School Approval Date: 2017.01.09 **Phone:** 250.807.9643 **Email:** yang.cao@ubc.ca

Type of Action: New Course

Rationale: This new course is being added to accommodate a growing number of graduate students in the School of Engineering with research interests in microwave engineering. Such a course will be of interest to graduate students in electrical engineering and the applied physical sciences.

Electrical circuits at microwave frequencies cannot be designed without accounting for the wave behaviour of signals. Traditional circuit analysis does not account for wave interference and must be replaced with transmission-line analysis. Students will learn to analyze and design microwave circuits with particular emphasis on passive networks such as couplers and power dividers.

Proposed Academic Calendar Entry:

ENGR 567 (3) Passive Microwave Circuits

Electromagnetic waves, transmission lines, waveguides, network parameters, Smith Charts, gain equations, even-odd mode analysis, matching networks, power dividers, couplers, metamaterials, and dispersion.

Draft Academic Calendar URL:

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

Present Academic Calendar Entry:

n/a

Category: 1

Faculty/School: School of Engineering **Date:** 20170115

Faculty/School Approval Date: 2017.01.31 Phone: 250.807.9643
Effective Session: 2017W Email: yang.cao@ubc.ca

Type of Action: Creation of New Course

Rationale: This new course is added to enhance the teaching and learning of thermal and fluidic sciences in the School of Engineering, Faculty of Applied Science. The course is targeted at undergraduate students mainly in mechanical engineering.

Students will learn experimental and measurement techniques and apply the techniques in designing thermal-fluid systems.

Draft Academic Calendar URL:

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

Proposed Academic Calendar Entry:

ENGR 479 (3) Measurement Principles in Thermal-Fluids

Instruments and methods of measuring fluid thermo-physical properties.
Pressure-based velocity measurements.
Thermal anemometry. Particle-based techniques for velocity measurement.
Sonic anemometry/thermometry.
Measurement of flow pressure and density. Measurement techniques for temperature and heat flux.
Fundamentals of data processing and analysis. [3-0-0].
Prerequisite: ENGR 310, ENGR 385

Present Academic Calendar Entry:

Category: 1

Faculty/School: School of Engineering **Date:** 20170116

Faculty/School Approval Date: 2017.01.31 Phone: 250.807.9643
Effective Session: 2017W Email: yang.cao@ubc.ca

Type of Action: Creation of New Course

Rationale: This school would like to take advantage of available sessional teaching resources and offer courses in specific areas on an irregular basis. As such we would like to create a special topics course code for the engineering program. This course code will be utilized across all three program thus negating the need for the ENGR 449 special topics in civil engineering course.

Draft Academic Calendar URL:

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

Proposed Academic Calendar Entry:

ENGR498 (3/6)d Special Topics in Engineering

Topics in engineering not covered in other technical electives. Students should consult the School of Engineering for the particular topics offered in a given year. This course may not be offered every year. [3-0-0]

Prerequisite: Fourth-year standing in the B.A.Sc. Program and approval of the Associate Director of Undergraduate Studies.

Present Academic Calendar Entry:

N/A

Present Academic Calendar Entry:

ENGR 449 (3) Special Topics in Civil Engineering

Topics in civil engineering not covered in other technical electives. Students should consult the School of Engineering for the particular topics offered in a given year. This course may not be offered every year. [3-0-0] Prerequisite: Fourth-year standing in the B.A.Sc. Program and approval of the Unit Head.

Category: $\overline{1}$

Faculty/School: Faculty of Creative & Critical

Studies

Dept./Unit: Critical Studies

Faculty/School Approval Date: 2016/11/18

Effective Session: 2017W1

Type of Action: New Course

Date: 2016/10/02

Contact Person: Dr. Francisco

Peña

Phone: 250.807.8044

Email: francisco.pena@ubc.ca

Rationale:

This course adds a new perspective to the current Spanish offerings by promoting a more interdisciplinary, transcultural and trans-historical approach to the study of literature.

Draft Academic Calendar URL:

n/a

Proposed Academic Calendar Entry:

SPAN 328 (3) The Spanish Inquisition, from Anti-Judaism to Persecution

Survey and analysis of the ideological background and historical development of the Spanish Inquisition in the context of western anti-Judaism. [3-0-0]

Pre-requisite: Third-year standing.

Present Academic Calendar Entry:

none

Category: 1

Faculty/School: IKBSAS Date: 20161124

Dept./Unit: Unit 2 **Contact Person:** Dr. Mary Forrest

Faculty/School Approval Date: 20170206 Phone: 250.807.9560
Effective Session: 2017W Email: mary.forrest@ubc.ca

Type of Action: Add new course

Rationale:

Dividing the course content from BIOC 493 (proposed to be deleted) into two one-semester courses (BIOC 494, 495), each with four hour long labs that run each week, will make it easier for student scheduling needs plus add needed hours into the course.

Furthermore, it will bring the requirements more in line with other laboratory courses. It will also allow for more in-depth coverage of the theory behind the techniques covered and analysis of the results obtained.

In addition, this course is becoming increasingly popular. Shorter labs will allow for the addition of more lab sections as needed.

Draft Academic Calendar URL: N/A

Proposed Academic Calendar Entry:

BIOC 494 (3) Biotechnology Laboratory I: DNA Manipulation

Current techniques in DNA manipulation and analysis will be presented, relevant to such areas as molecular biology, microbiology, and biochemistry. Topics include site- directed mutagenesis, variations in cloning techniques, sequence analysis, Southern blotting, plus maintenance of a research lab notebook. [0-4-0]

Prerequisite: one of BIOC 393 or BIOL 393.
BIOL 366 is strongly recommended.

Present Academic Calendar Entry:

Category: 1

Faculty/School: IKBSAS Date: 20161124

Dept./Unit: Unit 2 **Contact Person:** Dr. Mary Forrest

Faculty/School Approval Date: 20170206 Phone: 250.807.9560
Effective Session: 2017W Email: mary.forrest@ubc.ca

Type of Action: Add new course

Rationale:

Dividing the course content from BIOC 493 (proposed to be deleted) into two one-semester courses (BIOC 494, 495), each with four hour long labs that run each week, will make it easier for student scheduling needs plus add needed hours into the course.

Furthermore, it will bring the requirements more in line with other laboratory courses. It will also allow for more in-depth coverage of the theory behind the techniques covered and analysis of the results obtained.

In addition, this course is becoming increasingly popular. Shorter labs will allow for the addition of more lab sections as needed.

Draft Academic Calendar URL:

N/A

Proposed Academic Calendar Entry:

Present Academic Calendar Entry: N/A

BIOC 495 (3) Biotechnology Laboratory II: Gene Expression

Current methods in gene expression will be presented, relevant to such areas as molecular biology, microbiology, and biochemistry.

Topics include extraction, handling and

Topics include extraction, handling and manipulation of RNA, analysis of gene expression (transcriptional), production of recombinant proteins, and genetic transformation of eukaryotes. [0-4-0].

Prerequisite: BIOL 366 and one of BIOC 393, BIOL 393.

Category: 1

Faculty/School: IKBSAS Date: 20161124

Dept./Unit: Unit 2 **Contact Person:** Dr. Mary Forrest

Faculty/School Approval Date: 20170206 Phone: 250.807.9560
Effective Session: 2017W Email: mary.forrest@ubc.ca

Type of Action:

Revision to Calendar Description

• deletion of BIOC 493 (currently a 3 credit two semester course) with material to be divided into two new 3 credit one semester courses: BIOC 494 and BIOC 495

o revise the Biochemistry and Molecular Biology Major and the Microbiology Major to reflect this change

Rationale:

BIOC 493 (Biotechnology Laboratory) currently consists of a series of 6 hour labs that run every other week over the entire winter semester (Terms 1 and 2). Students find it very difficult to schedule other courses around these large bi-weekly time blocks. Plus many students find the 6 hours long labs very grueling to complete.

Dividing the course into two one-semester courses, each with four hour long labs that run each week, will make it easier for student scheduling needs plus add needed hours into the course.

Currently, the course consists of up to 70 hours of lab time, an extensive focus on writing (both in the maintenance of a proper research-style lab notebook and in a formal lab report), plus multiple assignments and lab exams. This is excessive for a single 3 credit lab course, especially in comparison to other laboratory courses such as BIOL/BIOC 393.

Dividing the content into two courses, each with four hour long labs offered each week, will bring the requirements more in line with other laboratory courses. It will also allow for more in-depth coverage of the theory behind the techniques covered and analysis of the results obtained.

In addition, this course is becoming increasingly popular. Shorter labs will allow for the addition of more lab sections as needed.

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,282,858,1069

Proposed Academic Calendar Entry:

[12218] Major in Biochemistry and Molecular Biology

[...]

Present Academic Calendar Entry:

[12218] Major in Biochemistry and Molecular Biology

[...]

Third and Fourth Years		Third and Fourth Years	
BIOC 304, 305	6	BIOC 304, 305	6
BIOL 366	3	BIOL 366	3
BIOC 393	3	BIOC 393	3
Arts electives	6	Arts electives	6
Biochemistry Option		Biochemistry Option	
Three of BIOC 402, 403, 405, 410, 420, 425	9	Three of BIOC 402, 403, 405, 410, 420, 425	9
CHEM 305	3	CHEM 305	3
Two of CHEM 304, 330, 333, 335, BIOC 493	6	Two of CHEM 304, 330, 333, 335, BIOC 493	6
Upper-level science elective	6	Upper-level science elective	6
Upper-level arts or science electives	6	Upper-level arts or science electives	6
Electives	12	Electives	12
Medical and Molecular Biology Option		Medical and Molecular Biology Option	
BIOC 308, 309	6	BIOC 308, 309	6
Two of BIOC 402, 403, 405, 410	6	Two of BIOC 402, 403, 405, 410	6
BIOC 407	3	BIOC 407	3
BIOC <u>494, 495</u> 1	<u>6</u>	BIOC 493 ¹	3
BIOL 318	3	BIOL 318	3
Two of BIOL 312, 314, 341, 363	6	Two of BIOL 312, 314, 341, 363	6
Electives	12	Upper-level elective	3

Total Credits	60	Electives	12
Minimum credits for degree	120	Total Credits	60
C		Minimum credits for degree	120
¹ BIOC 494 and 495 (Biotechnology Laboratory I and II) can be replaced by BIOC 448, a 6-credit lab-based directed studies course, though students may take both. Note: credit will be granted for only one of BIOC 393 or BIOL 393, and credit will only be granted for one of BIOC 493 and either BIOC 494 or BIOC 495.		¹ BIOC 493 (Biotechnology Laboratory) can be replaced by BIOC 448, a 6-credit lab-based directed studies course, though students may take both. Note: BIOC 393 and 493 are equivalent to BIOL 393 and 493 and credit will not be granted for both.	

Category: 1

Faculty/School: IKBSAS Date: 20161124

Dept./Unit: Unit 2 **Contact Person:** Dr. Mary Forrest

Faculty/School Approval Date: 20170206 Phone: 250.807.9560
Effective Session: 2017W Email: mary.forrest@ubc.ca

Type of Action:

Revision to Calendar Description

 deletion of BIOC 493 (currently a 3 credit two semester course) with material to be divided into two new 3 credit one semester courses: BIOC 494 and BIOC 495

o revise the Biochemistry and Molecular Biology Major and the Microbiology Major to reflect this change

Rationale:

BIOC 493 (Biotechnology Laboratory) currently consists of a series of 6 hour labs that run every other week over the entire winter semester (Terms 1 and 2). Students find it very difficult to schedule other courses around these large bi-weekly time blocks. Plus many students find the 6 hours long labs very grueling to complete.

Dividing the course into two one-semester courses, each with four hour long labs that run each week, will make it easier for student scheduling needs plus add needed hours into the course.

Currently, the course consists of up to 70 hours of lab time, an extensive focus on writing (both in the maintenance of a proper research-style lab notebook and in a formal lab report), plus multiple assignments and lab exams. This is excessive for a single 3 credit lab course, especially in comparison to other laboratory courses such as BIOL/BIOC 393.

Dividing the content into two courses, each with four hour long labs offered each week, will bring the requirements more in line with other laboratory courses. It will also allow for more in-depth coverage of the theory behind the techniques covered and analysis of the results obtained.

In addition, this course is becoming increasingly popular. Shorter labs will allow for the addition of more lab sections as needed.

Proposed Academic Calendar Entry:

Draft Academic Calendar URL:

http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,282,858,1242

Present Academic Calendar Entry:

[14436] Major in Microbiology

[14436] Major in Microbiology

[...]

[...]

Third and Fourth Years		Third and Fourth Years	
BIOL 311	3	BIOL 311	3
One of BIOL 354, BIOL 382	3	One of BIOL 354, BIOL 382	3
BIOL 393	3	BIOL 393	3
Microbiology electives from the following: a) strongly recommended electives: BIOL 318, 319, 354 or 382, 366, or BIOC 494 or 495 ⁴ ; b) other electives: BIOL 312, 314, 380, 381, 410, 420 ³ , 452 ³ , 480	21	Microbiology electives from the following: a) strongly recommended electives: BIOL 318, 319, 354 or 382, 366, or BIOC 493 ⁴ ; b) other electives: BIOL 312, 314, 380, 381, 410, 420 ³ , 452 ³ , 480	21
Science electives numbered 300 or higher	6	Science electives numbered 300 or higher	6
Other electives numbered 300 or higher	6	Other electives numbered 300 or higher	6
Electives to satisfy B.Sc. credit requirements	18	Electives to satisfy B.Sc. credit requirements	18
Total credits	60	Total credits	60
Minimum credits for degree	120	Minimum credits for degree	120
¹ BIOL 116, 125; CHEM 111, 113 or 121, 123; and MATH 100, 101 should be taken in the first year to ensure students have the prerequisites for second year.		¹ BIOL 116, 125; CHEM 111, 113 or 121, 123; and MATH 100, 101 should be taken in the first year to ensure students have the prerequisites for second year.	
² Strongly recommended.		² Strongly recommended.	

- ³ If approved by the program advisor as appropriate to Microbiology.
- ⁴ BIOC 494 and BIOC 495 may both be used towards the requirement to take 30 credits of upper level BIOL courses in the Major in Microbiology.

Note: credit will be granted for only one of BIOC 393 or BIOL 393, and one of BIOC 493 and either BIOC 494 or BIOC 495.

- ³ If approved by the program advisor as appropriate to Microbiology.
- ⁴ Students who take BIOC 493 will need to take a BIOL course under the Science electives numbered 300 or higher section to ensure they meet graduation requirements.

Category: 1

Faculty/School: IKBSAS Date: 20161209

Department/Unit: Unit 7 **Contact Person:** Dr. Kyle Larson

Faculty Approval Date: 20170206 Phone: 250.807.8564
Effective Session: 2017W Email: kyle.larson@ubc.ca

Type of Action: New course

Rationale: This course will enhance the tangible, hands-on, experiential learning that students gain during their undergraduate studies. This course is specifically focused on training students in the geologic field techniques standard in both academia and industry. This is a foundation course in the students' academic careers and prepare them for future work where skills such as field observation, data assimilation, hypothesis-driven directed study, and interpretation are widely applicable. To that end, it provides an opportunity for students to utilize the skills they have acquired in other courses (e.g. EESC 200; 325; 356) to elucidate real-world geological problems. Students will be trained in the rationale behind field research, how to parse often contradictory data and observations, and how to distill that into a unified, internally consistent geologic model. It is expected that this course will be eligible for students to take toward course requirements for registration with the Association of Professional Engineers and Geoscientists of British Columbia.

Proposed Academic Calendar Entry:

EESC 390 (3) Geological Field Mapping

Collection, interpretation, and presentation of geological data in the field. Typically held in the two weeks preceding the start of Winter Term 1. A special fee must be paid in advance. Prerequisites: EESC 200, EESC 325 and EESC 356.

Draft Academic Calendar URL: N/A

Present Academic Calendar Entry:

none



Docket Page 55 of 73
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

30 March 2017

To: Okanagan Senate

From: Nominating Committee

Re: Adjustments to Committee Assignments

The Senate Nominating Committee has been advised of one vacancy and one request for re-assignment from standing Committees of Senate and is pleased to recommend:

That Mr Myron Campbell be appointed to the Senate Admissions & Awards Committee until 31 August 2017 and thereafter until replaced, to replace Ms Anne Fleming (Resigned); and

That Mr Myron Campbell be appointed to the Senate Committee on Appeals of Discipline and Standing until 31 August 2017 and thereafter until replaced, to replace Dr Marianne Legault.

Respectfully submitted,

Dr Daniel Keyes, Chair Senate Nominating Committee

Documenting Learning in the 21st Century

Comprehensive Learning Record Green Paper

A presentation to the Senates of The University of British

Columbia

March 2017



Comprehensive Learning Record

The proposed comprehensive learning record is more than a grades and awards archive; it is a tool that:

- Enables students and the University to partner in documenting students' learning journeys;
- Encapsulates the diverse ways that learning takes place during a post-secondary career;
- Communicates the story "between the lines" of letter and number grades;
- Facilitates reflection within and across formal and informal learning contexts.



The Need

- UBC inspires diverse forms of transformative student learning
- The current transcript offers a poor representation of only a fraction of that learning
- What the University records sends a message about what it values
- Student expectations learning in and out of the classroom is valued and recognized.



- The traditional transcript continues to fulfill a vital function in post-secondary education
- No additional significant burden on Faculty-members
- Aging technological systems



The Challenge

 How to create a comprehensive record of the diverse student learning that takes place at UBC, alongside the development of new student academic systems, while preserving the vital function of the traditional transcript and respecting the value of faculty-members' time.



The Proposal

- Use the existing transcript as a launching point
- Build a repository of information around the transcript
- Involve students in curating a record of their learning to encourage critical reflection on the learning process as it occurs
- Enable students to activate different 'views' of the record, including and excluding information to tailor the record to different purposes
- Establish protocols to ensure the veracity and integrity of any record produced by 'UBC'.



Phased Implementation -

Comprehensive Record Phases

Traditional Transcript

Credential(s) awarded

Course Grades by academic term

Major scholarships and awards

> Select non-credit accomplishments

Competencies

Credit-based nondegree credentials

Phase 1: Do More with What We Have **Enhanced Transcript** (digital capability)

Information links

Designated Digital Artifacts

Non-credit credentials

Phase 2: Go Digital

Annotated Transcript (select/reflect/present)

Student-selected Digital Artifacts

Customised Views (e.g., by competency, by specialization)

Phase 3: Learner-Focused **Enhancement**

Experiences Transcript (verification)

Verified experiences outside the classroom

Phase 4: Broaden **Learning Horizons**



Do More With What We Have

 Add information to existing transcript without significant changes to the nature of the record



Go Digital

- Enhance existing transcript with digital capabilities allowing for connection to:
 - Syllabi
 - Award Descriptions
 - Digital Artifacts (academic work associated with forcredit courses)
 - Non-credit credentials



- Learner-Focused Enhancement
 - Student-selected digital artifacts
 - Empower students to decide which academic work best represents their learning
 - Customized views
 - Grant students and other users the ability to generate custom reports



- Broaden Learning Horizons
 - Addition of extra-curricular, co-curricular and other noncredit learning experiences to the learning record



UBC Documenting Learning in the 21st Century

Purpose:

The purpose of this Green Paper is to introduce to the University of British Columbia Vancouver and Okanagan Senates the concept of a "Comprehensive Learning Record" and to seek input on the merits of exploring such an initiative from a variety of stakeholders including students, Faculties, alumni, employers, and professional schools, amongst others.

Introduction:

UBC has identified as an institutional priority the provision of opportunities for transformative student learning through outstanding teaching and research, enriched educational experiences, and rewarding campus life.

Despite this commitment, the record that UBC currently keeps of students' nuanced and transformative learning journeys is limited to the set of courses, grades, standings and awards represented in the official transcript. In contrast, the development of co-curricular records (CCR) is a trending initiative across post-secondary institutions in Canada and the USA. Similarly, in the United Kingdom, the Higher Education Achievement Report (HEAR) has been adopted across many institutions of higher education. The common feature of these initiatives is that they record student participation in learning activities that are not usually listed in current official transcripts, typically extra- and co-curricular activities.

The Senate *ad hoc* Committee on Flexible Learning recognizes the value of these records and believes that they would represent an improvement over the existing UBC transcript. However, the Committee does not propose to simply follow this trend, but rather believes that UBC is well-positioned to stake out new ground through the creation of a "Comprehensive Learning Record" (CLR). The Committee envisions a record aimed not only at recording student experience and achievement for use at the conclusion of the post-secondary career, but at encouraging student reflection and enhancing student learning to assist students in directing their education as it occurs.

Given advances in our understanding of how people learn, growing interest among students for recognition of a broader range of their activities at University, changing trends in records provision at peer institutions, requirements for career success, and increased expectations of public accountability in post-secondary education, the Senate *ad hoc* Committee on Flexible Learning proposes the CLR as a new way to enable students and the University to document, reflect upon, and represent the learning outcomes achieved throughout the achievement of a UBC degree.

Background and Rationale

UBC, as an institution and a community, inspires learning that takes place in many ways. In addition to structured, for-credit courses, students learn through experiences such as student governance, teaching assistant training, professional development workshops, undergraduate research, workplace learning, peer leadership programs, community based learning and research, student clubs, athletics, and international learning experiences. The value of learning that takes place outside of the formal curriculum is well understood. Students gain a wide range of skills and knowledge through engagement in extra- and co-curricular experiences, particularly in the domains emphasized by employers as critical for career

success. Moreover, the greater a student's integration into the fabric of an institution, including through participation in extra and co-curricular activities, the more likely they are to persist until degree completion. ²

Despite the growing consensus around the importance of a comprehensive post-secondary experience and the value of extra and co-curricular activities, the formal record of learning maintained by UBC, like that of many post-secondary institutions, continues to emphasize to students the primacy of in-class, for credit learning. For many students, the sole form of learning actively tracked and 'counted' by the institution is for-credit coursework in the form of a final grade intended to represent the student's cumulative performance in a given course.

This disconnect between how learning occurs and how it is recorded represents an opportunity for the institution to reframe how it communicates to students what counts as learning, acknowledge that universities are complex enterprises for learning and to develop a means of recognizing and valuing learning that is not formally assessed within an academic program. With a strategic and considered approach, UBC stands to improve the way that it supports transformative student learning and the preparation of career ready graduates.

As part of this approach, the Senate *Ad Hoc* Committee on Flexible Learning proposes the creation of an 'comprehensive learning record' that will recognize and record student learning and achievement beyond what is represented by final grades in for-credit courses. In doing so, the institution can further communicate to students that the institution values learning that takes place outside of for-credit courses, encourage students to pursue diverse opportunities for learning, and assist students in planning co-curricular and extra-curricular experiences that complement their academic studies. By expanding the manner in which learning is recorded, the institution challenges itself to provide and support opportunities for more diverse forms of learning.

The development of enhanced records is not without precedent in North America. The first co-curricular records and student development transcripts were introduced in the American institutions in the 1970s and 80s. The first Canadian institutions to introduce CCRs were Brock University, Sir Wilfrid Laurier University and the University of Calgary in 2000³. At present, more than 50 Canadian post-secondary institutions have launched CCR programs or are in the process of doing so. While these records improve on the traditional transcript in many respects, they largely represent an expansion of the information the traditional transcript makes available, rather than a fundamental re-thinking of the of the nature and purpose of a record of student learning.

Rather than following the lead of these institutions, becoming a late-adopter of a 'traditional' co-curricular record, the Senate *ad hoc* Committee on Flexible Learning proposes that UBC become a leader in this area by developing a unique tool that not only records, but contributes to student learning. This "Comprehensive Learning Record" would be aimed first and foremost at assisting students in understanding their own knowledge, values and strengths, and secondly at communicating student experience and learning to external audiences such as prospective employers and academic institutions. This tool would help students to identify gaps in their knowledge and experience, understand how co-curricular and extra-curricular activities complement their academic study and facilitate student self-assessment and reflection on the learning that has occurred both inside and outside of the classroom. It would also assist educators and advisors in helping students to understand their own development, and

¹ Employer Priorities for Most Important College Learning Outcomes. Association of American Colleges & Universities, 2015. http://www.aacu.org/leap/public-opinion-research/2015-employer-priorities

² V. Tinto, Taking Retention Seriously: Rethinking the First Year of College, NACADA Journal, Vol. 19, Issue 2

³ Elias, Kimberly & Drea, Catherine (2013). The Co-curricular record: Enhancing a postsecondary education. College Quarterly, Vol. 16, Issue 1

counsel students on their academic and professional futures.⁴

With the coincidence of North American and British initiatives, the growing recognition of the value of co-curricular records and the ongoing effort to replace UBC's Student Information System, the Senate Ad Hoc Committee on Flexible Learning feels that the time is right for UBC to envision a Comprehensive Learning Record that does more than record courses and grades.

Proposed Concept:

The proposed Comprehensive Learning Record would build upon the content of the existing student record. At UBC, a student's official record comprises data and information contained within a suite of databases and software systems called the Student Information System. The business owner of the learning record is the University Registrar. The best-known representation of the learning record is the transcript. This official document is the institution's primary summary of what an individual has been credited with, learned and accomplished while they are a registered student. Typically a transcript includes credentials awarded, credits transferred, courses taken, grades earned, scholastic achievements (e.g., scholarships) and select "zero credit" activities (e.g., Instructional Skills certificate).

The strength of the existing transcript is that it succinctly captures a student's academic history and accomplishments in a format accepted and easily understood by educational institutions and other organizations throughout Canada and the world. However, in order to achieve this end, the existing transcript makes significant sacrifices in the quantity and quality of information provided to the reader, limiting the reader's ability to understand what is really represented by a listed item. With respect to courses, for example, the grade and standing are recorded, but there is nothing beyond the course name that captures information such as how the student was assessed, what their key learning gains were and what significant evidence of learning (e.g., a paper, a community project) were produced. For entries such as scholarships, the transcript provides no information, beyond the title of the award, regarding the nature or significance of the award or the basis upon which the student was selected.

The transcript serves a distinct and important purpose. The introduction of a Comprehensive Learning Record would not necessarily change or replace the current transcript. Instead, the vision of the Flexible Learning Ad Hoc Committee is to retain the transcript, using it as a launching point from which to build an innovative, new type of learning record.

This new learning record would draw upon existing transcript data, possibly augmented using technology, while also serving as a primary collection mechanism for additional data and information.

The information found in the traditional transcript would remain unaltered as part of the new record, and would continue to be controlled by the University, preserving the integrity of the transcript, and ensuring that it can continue to serve its essential function.

To this core information, the proposed comprehensive record would add new information providing further evidence of learning occurring inside of or outside of formally recognized, Senate-approved courses. This information could include content related a student's academic achievements, such as syllabi from courses completed by the student, examples of written or other coursework, written peer evaluations, or reflections authored by the student. It could also include information about experiential learning opportunities, extra-curricular educational activities and leadership roles. This content would be co-constructed by the university, students, and individuals or organizations within or outside of the

⁴ Drolet, Daniel (2010) Documenting and decoding the undergrad experience. University Affairs, Vol. 51, Issue 7

University that have played a role in delivering these experiences.

Given the volume of the totality of the information contained in the comprehensive learning record, the record may be best understood as a database used to generate reports or "views" tailored to different purposes, rather than a single, static report. Students and other users could be permitted to 'activate' or 'deactivate' different entries or categories of information and reorganize the selected information in order to emphasize different features of their post-secondary career. This capability will empower students to view their UBC experience from different perspectives, encouraging reflection and assisting in academic and career planning while also serving as a valuable resource in preparing applications for employment and further study.

With proper regard to privacy considerations, this capacity to create tailored reports may be valuable to other users of the system as well. Advisors engaged in counselling students could use this function to assist students in identifying themes and trends in their post-secondary careers, while instructors and administrators may be able to use this system to examine student reflection on and performance in a course or program over time to gain a better understanding of the impact and value to students of different features of the course or program, and how these change over time.

In these ways, the proposed record will serve not simply as a list of experiences and achievements that can be delivered to external audiences when the student leaves UBC. The Comprehensive Learning Record will be a tool that will build student understanding of the learning experience as it occurs, assisting students in tailoring their post-secondary careers towards their interests and goals while also helping educators and administrators to better understand the complete student experience and to ultimately deliver an improved experience in the future.

Implementation:

While the complete details of the implementation of the Comprehensive Learning Record are beyond the scope of this document, the Senate *ad hoc* Committee on Flexible Learning proposes a phased approach to adoption of the record.

As elements of the Comprehensive Learning Record will be possible only with technological improvements to current UBC systems, the precise timing of each phase of implementation outlined below would need to be determined based in part on the availability of the necessary technology, and the advancement of the Student Academic Systems Initiative (SASI).

The Committee recommends four implementation phases, as outlined in Figure 1 below:

Comprehensive Record Phases

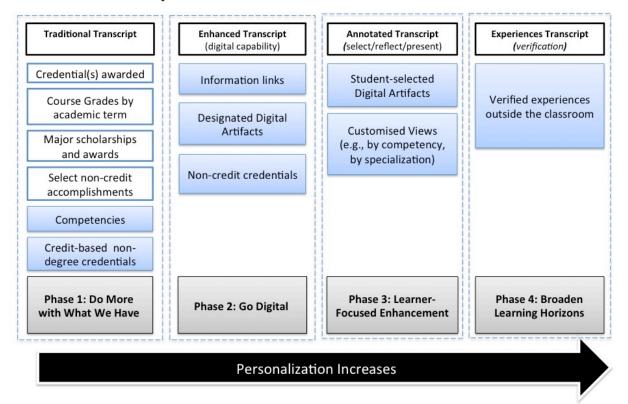


Figure 1: Comprehensive Record Phases of Implementation

Phase 1: Do More with What we Have

Phase 1 would enhance the existing transcript by adding to the current information, but without adding significant new categories of information or significantly changing the nature of the record.

The information added to the record as part of Phase 1 that is not included in the current transcript would include:

- Capacity for competency-based assessment schemes such as those required for programs with professional accreditation requirements; and
- Credit-based, non-degree credentials.

Phase 2: Go Digital

Phase 2 would enhance the existing transcript (following phase 1) with digital capabilities that would allow the record to connect to:

- Information links (such as syllabi or award descriptions);
- Designated digital artifacts (examples of work product completed as part of listed courses); and
- Non-credit credentials.

Phase 3: Learner-Focused Enhancement

Phase 3 would continue to add content to the record, while improving its capacity for customization. This phase would include two significant improvements:

- 1) Student-Selected Digital Artifacts: Whereas Phase 2 would allow for the inclusion of a limited set of digital artifacts selected by the University, Phase 3 would open this capacity to students, allowing students to select and upload the work product or other artifacts they feel best represent their learning and academic achievement.
- 2) Customised Views: Students and other users would be granted the ability to produce different reports using the information contained in the learning record database, including or excluding categories of information, or reordering entries.

Phase 4: Broaden Learning Horizons

Phase 4 would see the inclusion of learning experiences such as co-curricular and extra-curricular activities added to the comprehensive learning record.

These entries would include verified experiences taking place outside of the for-credit coursework.

While, as noted above, a complete implementation plan is beyond the scope of this paper, two key questions have arisen during the committee's deliberations that may also be of interest to Senate:

- 1) What categories and types of activities should be officially recognized, by whom, and according to what criteria?;
- 2) How will student participation in these activities be verified and validated?

The answers to these questions would need to be determined by a broader discussion among the University community should Senate endorse further exploration of this concept.

One possible model would be a form of advance certification by a committee or other body established for that purpose, of a given activity making it eligible for inclusion on the comprehensive learning record. Each certified activity would be associated with an approved description and a unit or individual, such as a faculty member, athletic coach, student leader, or community member, authorized to validate a student's participation in that activity. This model would minimize the demands on faculty members and others responsible for offering such experiences by requiring only that the activity be described once and that the involvement of individual students be confirmed.

In order to tailor the entries for individual students to their particular experience, students could also be provided with a means to create a concise commentary on the outcomes of the documented learning experiences. In addition, it might also be possible for students to add new types of experiences that would not require official validation as a separate category of information, provided established criteria are met.

Conclusion and Recommendations

The Senate *ad hoc* Committee on Flexible Learning proposes that, as UBC moves forward into its second century, significant improvements should be made in the manner in which the University records and recognizes learning. While UBC has begun to lag behind other institutions in this respect, the Committee believes that the proposed Comprehensive Learning Record stands to enhance the student experience and turn the University into a leader in this area.

The Senate *ad hoc* Committee on Flexible Learning respectfully recommends that the UBC Vancouver and Okanagan Senates endorse the continued exploration and development of the Comprehensive Learning Record. The Committee recommends that Enrolment Services be charged with responsibility for developing the Comprehensive Learning Record alongside the Student Academic Systems Initiative. Enrolment Services is asked to report to Senate periodically on the progress of the Comprehensive Learning Record, and to consult with Senate and its Committees as necessary to effectively implement the recommendations made in this report.