

**Vancouver Senate****THE SIXTH REGULAR MEETING OF THE VANCOUVER SENATE  
FOR THE 2016/2017 ACADEMIC YEAR****WEDNESDAY, 15 FEBRUARY 2017****6:00 P.M.****ROOM 182, IRVING K. BARBER LEARNING CENTRE, 1961 EAST MALL****1. Senate membership – Dr Kate Ross****Resignation**

Dr Bonita Sawatzky, Representative of the Joint Faculties

**2. Minutes of the Meeting of 18 January 2017 – Dr Santa Ono**  
(approval) (docket pages 3-28)**3. Business Arising from the Minutes – Dr Santa Ono****4. Tributes Committee – Dr Sally Thorne**

Memorial Minutes for Dr Jorgen Dahlie and Ms Laurenda Daniells (approval) (docket pages 29-31)

**5. Remarks from the Chair & Related Questions – Dr Santa Ono** (information)

- a. General Remarks
- b. Activity Report for 1 November 2016 to 15 January 2017 (information) (docket pages 32-39)

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

- a. Change in Name of the Faculty of Law (approval) (docket page 40)
- b. Graduate Academic Regulations for the Faculty of Commerce & Business Administration (approval) (docket pages 41-54)

**7. Admissions Committee – Dr Robert Sparks**

2017-2018 Admissions Targets (approval) (docket pages 55-64)

**8. Awards Committee – Dr Claudia Ruitenberg**

- a. UBC Tuum Est Experiential Award (approval) (docket pages 65-67)
- b. New and Revised Awards (approval) (docket pages 68-77)

## **9. Curriculum Committee – Dr Peter Marshall**

Proposals from the Faculties of Applied Science, Arts, Commerce & Business Administration, Forestry, Graduate and Postdoctoral Studies, Land & Food Systems, and Science (approval) (docket pages 78-404)

## **10. Admission and Curriculum Committees – Drs Robert Sparks and Peter Marshall**

- a. New Program: Bachelor of Design in Architecture, Landscape Architecture and Urbanism (B.Des) (approval) (docket pages 405-499)
- b. New Program: Master of Global Surgical Care (M.G.S.C.) (approval) (docket pages 500-561)

## **11. Nominating Committee**

- a. Appointments to the President's Advisory Committee for the Selection of a Vice-Provost International (approval) (docket page 562)
- b. Triennial Review Website (information) (docket page 563)

## **12. Report from the Provost**

Annual Report on Review of Academic Units– with Vice-Provost Eric Eich (information)(docket pages 564-597)

## **13. Report from the Registrar**

2017-2020 Convocation Senator Election Results (information) (docket page 598)

## **14. Other Business**

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

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



# VANCOUVER SENATE

## MINUTES OF 18 JANUARY 2017

### DRAFT

#### Attendance

**Present:** Dr S. Ono (Chair), Dr K Ross (Secretary), Dr R. Anstee, Ms E. Biddlecombe, Dr L. Burr, Dr H. Brock, Ms L. Castro, Dr A. Dulay, Dr W. Dunford, Dr S. Forwell, Dean B. Frank, Mr S. Haffey, Acting Dean K. Harrison, Ms M. Huang, Dr A. Ivanov, Mrs C. Jaeger, Dr P. Keown, Ms H. Kwan, Mr D. Lam, Dr P. Loewen, Dr K. Lo, Dr D. MacDonald, Mr K. Madill, Dr P. Marshall, Dr W. McKee, Mr B. McNulty, Dr P. Meehan, Dr C. Naus, Dean S. Peacock, Dr N. Perry, Dr A. Redish, Dr A. Richardson, Dr L. Rucker, Dr C. Ruitenberg, Mr I. Sapolnik, Dr S. Singh, Ms S. So, Dr R. Sparks, Mr J. Spiedel, Dr R. Tees, Dr S. Thorne, D. Tse, Dr L. Walker, Ms K. Williams, Dean R. Yada

**Regrets:** Dr P. Adebar, Mr T. Ahmed, Dr S. Avramidis, Mr M. Bancroft, Ms M. Burton, Dr A. Collier, Dean M. Coughtrie, Ms D. Coulbourn, Dean C. Dauvergne, Mr N. Dawson, Mr B. Fischer, Dr J. Gilbert, Dr D. Gillen, Dr C. Godwin, Prof. B. Goold, Chancellor L. Gordon, Dr P. Harrison, Dean R. Helsley, Ms M. Huron, Dean J. Innes, Ms T. Johnson, Dr S. Knight, Mr H. Leong, Prof. B. MacDougall, Ms A. Maleki, Dr C. Marshall, Dr C. Nislow, Dr G. Peterson, Dean S. Porter, Ms B. Sawatzky, Dr S. Schneider, Dean C. Shuler, Ms S. Sterling, Dr R. Topping, Dr R. Wilson, Dr D. Witt, Mr S. Zbarsky

**Clerk:** Mr C. Eaton.

#### Call to Order

The Chair of Senate, Dr Santa J Ono, called the fifth regular meeting of the Vancouver Senate for the 2016/2017 Academic Year to order at 6:03 pm.

#### Senate Membership

The Registrar announced the resignations of Dr Kenneth Baimbridge, Representative of the Joint Faculties, and Dr Andrew Riseman, Representative of the Faculty of Land & Food Systems.

#### Minutes of the Previous Meeting

Richard Tees  
Lance Rucker

}

*That the Minutes of the Meeting of 16 November 2016 be adopted as corrected.*

*Correction: Senator Jaeger's correct title is Mrs.*

Approved

#### Tributes Committee

The Chair of the Senate Tributes Committee, Dr Sally Throne, presented.

**President Emeritus Dr. David Strangway, OC**

President Emeritus Dr. David Strangway was born in Simcoe, Ontario, in 1934. He moved with his missionary parents to Angola at a young age, only returning to Canada aged 18 to begin studying at the University of Toronto in 1952. Having earned his B.A., M.A. and Ph.D. in Physics by 1960, Dr. Strangway spent the next period of his life teaching at the University of Colorado and MIT, before being invited to join NASA in 1970 as the Chief of their Geophysics and Physics Branch at the Johnson Spacecraft Centre in Houston, Texas. While at NASA, Dr. Strangway was responsible for the geophysical aspects of the Apollo moon missions, including experiment selection and attendant astronaut training, site selection and real-time mission support.

Returning to the University of Toronto in 1973, he served variously as Chair of the Geology Department, Academic Vice-President and Provost, and Acting President from 1983-1984.

On November 1st 1985, Dr. Strangway became the 10th President of UBC, a position he held for 12 years until 1997. During this period he oversaw a major campus building program – with construction projects estimated to total over \$900 million and including buildings such as the First Nations House of Learning, the Chan Centre and the Morris and Helen Belkin Art Gallery. In addition, UBC's endowment grew from under \$100 million to over \$500 million over the course of Dr. Strangway's tenure as President. This growth has continued, with the endowment standing at around \$1.3 billion today, a fact many attribute to Dr Strangway's hugely innovative and successful fundraising efforts. As a result of these and other activities at UBC, including driving an increased focus on quality research, Dr Strangway is credited with extending the university's national and international reputation, allowing the university to develop into the world-renowned institution it is today.

In 1998 the Canadian government appointed Dr. Strangway as the President and CEO of the Canada Foundation for Innovation, whose role was to strengthen research and technology capabilities of Canadian universities, colleges and research hospitals. By the time Dr. Strangway stepped down in 2004, the Foundation had invested more than \$2.7 billion into Canadian institutions, helping to stem the flow of Canadian researchers to other countries.

Alongside his role at the Canada Foundation for Innovation, Dr. Strangway founded Quest University Canada in Squamish, BC, also serving as its President and Chancellor. The private non-profit liberal arts and sciences university – the first of its kind in Canada – was incorporated in 1998, and graduated its first class of students in 2011.

Dr. Strangway was made an Officer of the Order of Canada in 1996, and the following year he received the Republic of Korea's First Order of Civil Merit, the first non-Korean to receive the honour. He was also named a Fellow of the Royal Society of Canada, was awarded the Queen's Silver, Gold and Diamond Jubilee medals, and was a recipient of the NASA medal for Exceptional Scientific Achievement.



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

### **Dr. John M. Gosline**

The first professor to bring biomechanics research to UBC, Dr. John M. Gosline joined Department of Zoology in 1973 after obtaining his BA Hons from UC Berkeley, a PhD from Duke University, and spending three years as a Postdoctoral Fellow at Cambridge University. Starting his UBC career as an Assistant Professor, Dr. Gosline became a Professor in 1986, and served on Senate as a representative of the Faculty of Science from 1993 to 1996. His research focused on the structure and mechanical properties of biological materials across a range of species, including slugs, spiders and jellyfish, and his work resulted in more than 100 publications as well as several books and patents. Dr. Gosline is best known for his work on elasticity in structural proteins such as spider silk, and he was interviewed about this topic by the media as recently as September of this year.

Dr. Gosline received a number of notable awards throughout his career, including the Killiam Research Prize in 1999 and the Faculty of Science Achievement Award for Service in 2005. In 1985 he became a Fellow of the American Association for the Advancement of Science, and in 1997 he was named a Fellow of the Royal Society of Canada.

Dr. Gosline retired in 2008 after 35 years at UBC, but remained active as a Professor Emeritus. The John M. Gosline Biomechanics Fund has been established to continue his work and to foster and recognize excellence in comparative biomechanics, aiming to establish an annual John M. Gosline Biomechanics Lecture and to create a John M. Gosline Biomechanics Fellowship.

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

### **Dr. Harvey Mitchell**

Born in Winnipeg in 1926, Harvey Mitchell began his working life in his family's grocery store and butcher shop before studying history at the University of Manitoba. Continuing his studies with a master's degree in history from the University of Minnesota, in 1954 Mitchell and his wife moved to England, where he earned his Ph.D. at University College London.

From 1956 to 1960 Dr Mitchell divided his time between Canada and the U.K., setting up the Provincial Archives in St John's Newfoundland, spending a year working for Gage Publishing in Toronto, and receiving a Nuffield Fellowship in London in 1959.

After a number of years spent teaching at the Universities of Regina and Calgary, Dr. Mitchell joined the UBC Department of History in 1967, focusing his research on European intellectual history and studies of Alexis de Tocqueville and Voltaire. Before retiring in 1989, Dr. Mitchell authored five books and many articles for a wide range of journals, including *History of Political Thought*, the *Bulletin of the History of Medicine*, and the *International Journal of Law and Psychiatry*.

Dr. Mitchell served on Senate as a representative of the Faculty of Arts from 1975-1978, and was a pioneer of UBC's Arts One program, encouraging students to take an interdisciplinary approach to important historical, philosophical and literary questions.

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

Sally Thorne  
Philip Loewen

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*That Senate approve the Memorial Minutes for Dr. David Strangway, Dr. John M. Gosline and Dr. Harvey Mitchell, that they be entered into the Minutes of Senate and copies be sent to the family of the deceased.*

Approved

### Remarks from the Chair

Dr Ono expressed his regret and apologies to the Senate for the re recent events regarding Dr John Furlong and the damage done to the University's reputation. In providing background, he stated that the Department of Athletics has an annual fundraiser for around 1000 persons. Dr Furlong has an honorary degree from UBC and many of his family members are alumni of the University. He was invited by UBC Athletics to give an address at a fundraiser to raise money for UBC Athletics and the Thunderbird varsity teams, and as President he too was invited to give welcoming remarks. In late fall it became clear to both himself and the Board of Governors that there was some degree of controversy regarding Dr Furlong and a number of allegations of abuse directed at him as a teacher at a residential school. After a conversation between UBC Athletics and the administration the decision was made to rescind the invitation. The rationale for this was that it was in UBC and Dr Furlong's best interest rescind the invitation to avoid the potential for an embarrassing situation at the event. Dr Ono agreed to be the keynote speaker in his place. This occurred shortly before Christmas when many people were not around to participate. The President advised that he then received over 175 items of correspondence regarding Dr Furlong as the invitation and its rescinding became a matter of national news. It was clear that this was a grey situation, and regardless of what decision was made, not everyone would be happy.

Dr Ono advised that this was a painful situation for many, especially considering its relationships with much important work at UBC, and in particular work on addressing sexual assault. Dr Ono advised that he read and watched recordings of the statements of the accusers, and legal counsel gave him a comprehensive idea of what had been reviewed by the legal system. The President advised that he had reached the conclusion at this time, taking into consideration what had been decided by the courts, there was no reason to exclude Dr Furlong from the event. Dr Ono knew that this was a disappointing decision for some and he apologises to them for that.

Senator Singh thanked the President for the explanation and the apology. He expressed that he would like to see a path forward to avoid future indecisiveness or "flip flops" on controversial

issues. He was sure learning had been done but asked what could be done to repair relations with First Nations communities and to avoid these kinds of problems for the future.

Dr Ono advised that he met with the sexual assault policy committee and panel and discussed the situation, and subsequently released a statement on his personal commitment to developing a robust policy. He has also communicated with the President's Advisory Committee on First Nations. With respect to the first comment, it is difficult to always know exactly what was going on everywhere. Both he and the Vice-President, Students were not aware of the invitation in the first place and this indicated a need for stronger communication and oversight. It was difficult to communicate with everyone over the holidays but that is not an excuse.

Senator Forwell noted that as senators we often have to explain the University's actions and position and she appreciated the information shared by Dr Ono. She noted that while the Senate had confidence in Dr Ono, the public may not without the full facts on the fullness of his reflection and consideration of the matter.

Dr Ono invited senators to have more in depth conversations with him at their convenience on this topic if useful

Finally, Dr Ono advised that there were a good pool of candidates for Provost. He reiterated his desire to provide the names of the finalists to the community. He further advised that similarly, the process was proceeding well for the search for a Vice-President, Research.

### **Admissions Committee**

The Committee Chair, Dr Robert Sparks, presented.

#### **FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES: ADMISSION – ENGLISH LANGUAGE PROFICIENCY STANDARDS AND GRE REQUIREMENTS**

Robert Sparks	}	<i>That Senate approve changes in English Language Proficiency Standards and GRE Requirements for applicants to graduate programs in the Faculty of Graduate and Postdoctoral Studies, effective for admission to the 2017 Winter Session and thereafter.</i>
Richard Anstee		

Dr Sparks briefly described the proposed changes.

Approved

#### **BACHELOR OF ARTS AND BACHELOR OF FINE ARTS – READMISSION**

Robert Sparks	}	<i>That Senate approve changes in readmission requirements for students required to withdraw from</i>
Jason Speidel		

*the Bachelor of Arts and Bachelor of Fine Arts program, effective for entry to the 2017 Winter Session and thereafter.*

Approved

## **Agenda Committee**

Dr Peter Marshall presented on behalf of Dr Paul Harrison, Chair of the Senate Agenda Committee

### **2017/2018 SENATE MEETING DATES**

Dr P. Marshall informed Senate that, pursuant to Rule 17 (a) of the *Rules and Procedures of Senate*, the following dates had been selected by the Agenda Committee for the regular meetings of Senate next session:

- Wednesday September 20, 2017
- Wednesday October 18, 2017
- Wednesday November 15, 2017
- Wednesday December 13, 2017
- Wednesday January 18, 2018
- Wednesday February 28, 2018
- Wednesday March 21, 2018
- Wednesday April 18, 2018
- Wednesday May 16, 2018

All meetings will be from 6:00 pm to 8:30 pm at the Victoria Theatre (IKBLC 182), unless another location is determined by the Senate Agenda committee.

## **Awards Committee**

*See Appendix A: Awards Report Part 1 and Appendix B: Awards Report Part 2*

Dr Lawrence Burr, Chair of the Committee, presented.

### **NEW AND REVISED AWARDS FOR NOVEMBER**

Lawrence Burr  
Richard Tees

}

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

Approved

## NEW AND REVISED AWARDS FOR DECEMBER

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

Senator Burr noted that over \$100 000 in new student funding was proposed for approval his month.

Approved

## Curriculum Committee

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

*See Appendix C: Curriculum Report*

## NOVEMBER CURRICULUM REPORT

Peter Marshall	}	<i>That the new courses and revised program brought forward by the faculties of Applied Science, Land and Food Systems, Pharmaceutical Sciences and Science be approved.</i>
Robert Sparks		

Dr Marshall briefly described the proposals.

Approved

## Nominating Committee

The Chair Senate Nominating Committee, Dr Richard Tees, presented.

## COMMITTEE MEMBERSHIP CHANGES

Richard Tees	}	<i>Dr Richard Anstee be appointed to Senate Academic Building Needs Committee until 31 August 2017 and thereafter until replaced, to replace Dr Kenneth Baimbridge;</i>
Philip Loewen		

*Dr Kin Lo be appointed to the Senate Curriculum Committee, until 31 August 2017 and thereafter until replaced, to replace Dr Kenneth Baimbridge; and*

*Dr Kin Lo be appointed to the Council of Senates*

*Budget Committee until 31 August 2017 and  
thereafter until replaced, to replace Dr Kenneth  
Baimbridge*

Approved

## **Revisions to Procedures to Policy 18**

Dr Tees advised Senate that under Policy 18: Appointment of Designated Senior Academic Administrators (Joint Senate and Board Policy), the Board and Senates have allowed the President to approve and revise procedures for implementation. On 5 December 2016, the President approved procedural revisions to facilitate the establishment of the new associate vice-president academic position: the Vice-Provost International. Those revisions are reported to the Board and Senate for information,

### **VICE-PROVOST INTERNATIONAL SEARCH COMMITTEE APPOINTMENTS**

Dr Tees advised that The Senate Nominating Committee has received a request from the Provost for three Senate appointees (two of whom must be faculty members, and one of whom must be a faculty member or a student) to the search committee for a Vice-Provost International pursuant to the revised procedures to Policy 18. In consideration of the Committee's previous decisions regarding recommendations under Policy 18, the Committee will solicit nominations from all UBC faculty members or students for these appointments and hopes to present its recommendations to Senate at the February meeting.

### **TRIENNIAL REVIEW OF SENATE COMMITTEES AND PROCEDURES**

Dr Tees reminded Senate that in the third year of each triennium, the Senate considers recommendations from the Agenda and Nominating Committees for revisions to its internal structures and procedures. The Agenda and Nominating Committees have asked for a website to be established to provide background information and facilitate submissions for the review process. This should be available by 1 February, and at that time, the committees will be pleased to consider submissions from senators, senate committees, administrators, faculties, and the broader campus community. As in past trienniums, detailed requests will also be sent to senate committees regarding their own internal operations.

## **Teaching & Learning Committee**

Dr André Ivanov, Chair of the Senate Teaching and Learning Committee, introduced Dr Janet Giltrow, Professor of English, to present on Program Outcomes in the Arts. He suggested three questions for senators to consider

- 1) How can better articulated or more specific course outcomes be used to promote student and faculty engagement?
- 2) How should UBC support the articulation to more meaningful program outcomes in all faculties?

- 3) Just as senate oversees course learning outcomes, should senate do the same for program outcomes?

Dr Giltrow noted that there was some resistance in arts to the idea of program outcomes. Complaints included “job training” academic freedom, and corporatisation. With regards to academic freedom, Dr Giltrow opined that program outcomes are a consensus judgement of departments, faculties, and universities rather than individual judgments.

Dr Giltrow suggested that there was a tradition of stating arts outcomes as critical thinking and communications skills no matter the discipline. But then, why do we have 22 disciplines?

Dr Giltrow then outlined example program descriptions for several programs.

Dr Giltrow noted that departments were asked not just for their disciplines but for their disciplines at UBC.

Dr Giltrow noted that with outcomes visible, we have material for students’ awareness and for department development, curriculum renewal, and for community partnerships. We can consider capacity or incapacity for curriculum to achieve the states outcomes. Is there gap between outcomes and traditional genres, lectures, quizzes, term papers etc. What is the role of research disciplines in undergraduate experiences?

Dean Peacock said that this resonates a lot with the Science side of the University. He noted that these challenges were similar to those found by the Carl Wieman initiative. Science also found that once you clearly articulated learning outcomes you find your assessment is wanting.

Senator Haffey noted that many Arts grads did not work in their particular academic major field, but that skills could be transferable. He applauded this work, but expressed a concern that departments could not always be considering the broader implications of what they teach.

Dr Giltrow replied that she thought about this concern for a long time. We have to understand what the connection is between brilliant hires and our curriculum.

The Provost noted that UBC has interdisciplinary studies and students who want to study outside of a discipline have to produce similar statements.

Senator Sapollnik expressed that this would be helpful for students considering majors. He noted that as a Senator and student in Arts this was the first he had heard of this idea. In seeking opportunities following UBC this framework would be extremely valuable to students.

Dean K. Harrison advised that the heads in Arts had a recent opportunity to view more of these outcomes.

The President noted that while he was at Emory University as a senior vice-president, learning outcomes/assessment were mandated by some regional accrediting commissions. He noted that many professional programs did this already and arts was usually the most difficult; however, 10 years later he said that has improved the learning experience.

Dr Giltrow noted that the outcomes of some professional programs around ethics etc were inspiring.

### **Tributes Committee**

Dr Thorne presented.

*See Appendix D: Emeritus Report*

### **EMERITUS APPOINTMENTS**

Sally Thorne	}	<i>That the attached list of individuals for emeritus status be approved and that, pursuant to section 9(2) of the University Act, all persons with the ranks of Professor Emeritus, Associate Professor Emeritus, Assistant Professor Emeritus, Senior Instructor Emeritus, General Librarian Emeritus or Administrative Librarian Emeritus be added to the Roll of Convocation.</i>
Richard Tees		

Approved

### **Reports from the Provost**

#### **ANNUAL REPORT ON ENROLMENT**

Vice-Provost Pam Ratner presented the distributed report, and thanked Stephanie McEwan, Joseph Furguson, and Kate Ross for their work on the report.

Dr Ratner highlighted the following points:

- UBC has slightly surpassed its governing-funded number of domestic undergraduate students.
- We have increased our enrolment of Aboriginal students
- The University is working to ensure a strong national representation of students; and
- We are maintaining a healthy enrolment of a diverse international student body representing more than 100 countries.

Dr Ratner noted that domestic applications were up by 1.8% this year, and international by 14.6%, while domestic offers were down by 0.2% and international up by 8%.

Senator Dunford asked about student completion and graduation rates, noting that for students it was likely better to fail after first year rather than second or third.



Dr Ratner suggested that UBC did quite well, and was slightly better than our nearest competitor, the University of Toronto. Not all students who did not complete failed, some transfer to other institutions.

Senator Williams took issue with the claim of diversity of a student body. She suggested that when she looked around campus it did not look diverse to her.

Dr Ratner said this point was well taken. We have an international student initiative that works on every continent but students apply and are considered under one pool and we hope we are admitting the strongest. We have disproportionate numbers of applications from some students. We have a commitment to diversity. We typically represent diversity in terms of country of origin but students have expressed a concern regarding socioeconomic diversity. As a result we have created new scholarships to help students who perhaps once could have attend UBC but no longer could due to cost. Finally, she noted that funding has been set aside for a commitment to diversity fund that Dr Sara-Jane Finlay would speak to later in the meeting.

The President asked if we had data on cross applications between UBC and Toronto, or McGill for instance, such as the US clearing houses.

Dr Ratner replied that the best information we had was surveys of admittees, and the response rate is not great for those who do not attend and the sample was likely biased. UBC tends to attract more students in such cases.

Senator Haffey thanked Dr Ratner for her report.

#### ANNUAL REPORT ON STUDENT EVALUATIONS OF TEACHING

Dr Eric Eich presented on 2015 Winter student evaluations of teaching. He set out the scope of the evaluations as follows:

- 7335 instructor evaluations were submitted to the university for 6234 course sections in which the **University Module Item (UMI)** questionnaire was administered
- The UMI includes six items, five specific in orientation, one general
- All items evaluated on 5-point scale – *excellent* (5), *good* (4), *adequate* (3), *poor* (2), *very poor* (1) – that features reasonable symmetric anchor points and a clear midpoint

Dr Eich noted that our mean rating was 4.2/5 and median was 4.3/5. Overall, evaluations of quality were very high, with relations between “in class” submissions and response rates indicating increased response rates and decreased variance in those rates as the proportion of “in class” (15-minute) submissions increase. He further noted that in 2014, Centre for Teaching, Learning, and Technology (CTLT) researchers developed a set of recommended minimum response rates based on the observed variability in the ratings of UBC instructors over several years. Evaluations with response rates below the minimum should be interpreted with care, particularly if they are anomalous.

Dr Eich further noted that in 2015W, the overwhelming majority of evaluations in sections with 75 or more students met or exceeded the minimum response rates. These sections account for 57% of the total enrollment. However, more than half of the sections with 35 or fewer students did not meet the minimum response rates. These sections account for 20% of total enrollment. CTLT will redouble their efforts to increase students' participation in online surveys in sections with under ~ 50 students.

Dr Ivanov noted that this report was presented to the Senate Teaching & Learning Committee and the committee endorsed the report and acknowledges the importance of the data. The Committee is heartened by the data being used to improve teaching.

Dr Tees asked if there had been any changes in the results noted between 2014 and 2015.

Dr Eich replied that there had been virtually none.

#### **COMMITMENT TO DIVERSITY FUND**

Dr Finlay advised that in December 2015, the Board approved the Commitment to Diversify Fund. From that, funding was proposed with \$300 000 this year and growing to \$2 000 000 by 2018. The intention of the fund is to support the recruitment and retention of diverse students, and a Student Diversity Initiative Project team, working with an advisory committee, will identify priorities for that fund using an analysis of UBC data on student experience, literature review of approaches to diversity at peer institutions, and facilitated focus groups with frontline staff. Presently, that work is being viewed in the following categories:

##### **Recruitment Strategies**

UBC's commitment to diversity in recruiting must be further enhanced in recruitment strategies and admissions policies, and aligned with efforts to engage and support diverse students.

##### **Classrooms and Curriculum**

Classrooms and curriculum provide a significant space for students to engage with each other and their teachers across difference. Faculty should consider ways in which the relationship between intercultural competence and academic success could be conveyed through the curriculum.

##### **Extracurricular Spaces**

Inclusive and welcoming spaces are an essential ingredient for student engagement.

##### **“International” Students**

Many stakeholders questioned how the term “international” student is used in reference to diversity since many of our domestic students are from diverse backgrounds.

##### **Cultural Dimensions**

UBC's understanding of diversity should go beyond ethnicity, national origin, and language to include other identity characteristics such as socio-economic status and gender identity.

Staff, Faculty, and Graduate Students.

Many stakeholders suggested UBC give greater emphasis to intercultural competence as a requirement in the hiring and evaluation of all faculty and staff. Responsibility for diverse students should be a broad responsibility and not fall to those who share diversity characteristics with students.

Dr Finlay advised that in April a framework for the fund will be presented to the board.

Senator Lam noted that Ms Jenna Omassi and Dr Jude Tate came to speak to the student senator caucus and the caucus is committed to seeing this as a priority next triennium.

Senator Forwell suggested that age and ability should be included in diversity.

Senator Anstee noted that recruiting was an obvious area for ISI's work at least for countries. In his opinion this was our key problem. It is very costly to recruit students from some countries.

Dr Ratner noted that the ISI did target some countries in particular, those with economies capable of supporting students at UBC. Applications from those countries were up. Kazakhstan, Indonesia, India. We are concerned about the risk of being reliant on any one country.

Dr Ross noted that the increase in applications from international students was spread across many countries.

Dr Ono said that this was an effort in the US for some time. He noted that one of the most effective things done in his experience was a 1-day diversity conference.

Senator Sparks invited Dr Finlay to a future meeting of the Senate Admissions Committee. Recruit for diversity and admit on merit has been a principle at UBC. He suggested that needs based funding being a larger pool could help with diversity of backgrounds of applicants.

The President further noted that he has set up a working group to better support the disabled community at UBC.

### **Reports from the Registrar**

#### **RESULTS OF THE 2017-2020 ELECTIONS TO THE BOARD OF GOVERNORS AND OF JOINT FACULTIES SENATORS**

#### **BOARD OF GOVERNORS**

The Registrar announced that subsequent to the call for nominations issued on 17 October 2016, elections were held for representatives of faculty members and staff from the Vancouver campus to the Board of Governors from 21 November to 5 December 2016. Pursuant to Section 16 of the University Act, the results were formally reported to the Senate.

Faculty Members:

Menzies, Charles R. 227  
Chaudhry, Ayesha S. 196  
Illes, Judy 189  
Morrell, Cameron 79

Total 691 votes

Drs Charles R. Menzies and Ayesha S. Chaudhry were elected; their terms of office is from 1 March 2017 until 28 February 2020 and thereafter until successors are elected.

Staff Member:

Fernandez, Darran 150  
Pini, Claudio 143  
Gorczynski, Chris 137  
Belanger, Leisa 96  
Andraza, Gary 75  
Ludlow, Joanna 50  
Yu, Minghui 43  
Kline, Cathy 41  
Vered, Nancy 39  
Murray, Matthew 37  
Spoiled Ballot 1

Total 827 votes

Mr Darran Fernandez was elected; his term of office is from 1 March 2017 until 28 February 2020 and thereafter until a successor is elected.

**REPRESENTATIVES OF THE JOINT FACULTIES TO SENATE**

Further to the call for nominations for faculty members of the Vancouver Campus to fill the twelve (12) positions for representatives of the Joint Faculties on the Vancouver Senate issued first on October 17th, 2016 and subsequently on November 21st, 2016 eight (8) valid nominations have been received. Therefore pursuant to Section 15 of the University Act the following faculty members were acclaimed as elected as representatives of the Joint Faculties on the Vancouver Senate for terms beginning on September 1st, 2017 and ending August 31st, 2020 and thereafter until successors are elected:

- Perry Adebar, Professor, Faculty of Applied Science
- Susan Forwell, Associate Professor, Faculty of Medicine
- Paul G. Harrison, Associate Professor, Faculty of Science

- Carol Jaeger, Senior Instructor, Faculty of Applied Science
- Paul A. Keown, Professor, Faculty of Medicine
- William McKee, Assistant Professor, Faculty of Education
- Santokh Singh, Professor of Teaching, Faculty of Science
- Sally Thorne, Professor, School of Nursing

A third and final call for nominations for the four (4) remaining positions was issued on Monday, January 9th, 2017.

#### **2017/2018 ACADEMIC YEAR**

The Registrar informed Senate that as per Policy V-125, key dates for the 2017 Winter and 2018 Summer Sessions were set as follows:

##### **2017 Winter Session:**

Term 1 begins	Tuesday, September 5, 2017
Last day of Term 1 classes for most faculties	Friday, December 1, 2017
First day of exams for Term 1	Tuesday, December 5, 2017
Last day of exams for Term 1	Wednesday, December 20, 2017
Number of Teaching Days	61

Term 2 begins	Wednesday, January 3, 2018
Mid-term break	February 19 – February 23, 2018
Last day of Term 2 classes for most faculties	Friday, April 6, 2018
First day of exams for Term 2	Tuesday, April 10, 2018
Last day of exams for Term 2	Wednesday, April 25, 2018
Number of Teaching Days	60

##### **2018 Summer Session:**

Term 1 begins	Monday, May 14, 2018
Last day of Term 1 classes for most faculties	Thursday, June 21, 2018
First day of exams for Term 1	Monday, June 25, 2018
Last day of exams for Term 1	Friday, June 29, 2018
Number of Teaching Days	28

Term 2 begins	Tuesday, July 3, 2018
Last day of Term 2 classes for most faculties	Friday, August 10, 2018
First day of exams for Term 2	Tuesday, August 14, 2018
Last day of exams for Term 2	Saturday, August 18, 2018
Number of Teaching Days	28

The Associate Registrar, Mr Christopher Eaton, advised Senate that the Academic Policy Committee had recently undertaken a review of UBC's academic year in consideration of frequent comments and concerns from several components of the UBC community regarding the academic year. He stressed that there were a large number of competing interests and requirements that were built into the academic schedule that often improvements in one area could lead to detriments in others. He noted that last Spring, the two Academic Policy Committee Chairs, Provost's offices and Registrar's Office came together and agreed to review the academic years at UBC. Key factors under consideration were:

- There are presently two similar, but different, academic years for UBC's Vancouver and Okanagan campuses.
- The academic year officially only applied to undergraduate programs, but in practice most graduate and professional programs followed it.
- The academic years were constructed by the Registrar's Office under directions from Senate policies O-125 and V-125.
- Draft academic years are set out 5 to 7 years in advance and are confirmed in January of each year.
- Differences between the academic years are around exam scheduling, holidays, and breaks.
- Pedagogical, accreditation, and regulatory needs for contact hours are key drivers.
- UBC tends to have between 120 and 122 teaching days per Winter Session, one of the fewest in Canada.
- A term 1 reading week was a frequent student request for the Vancouver campus (one already exists for the Okanagan), as is a larger gap between the end of December examinations and the start of Term 2 in January.
- Not starting in August or going into May are specific concerns for those who do not live in 12-month housing.
- Faculty requests for the academic year to align more around the primary and secondary school schedules for both the starts of term and reading/spring breaks.
- Inequity across days of the week given that most holidays occur on Mondays.
- The Lunar nature of Easter.
- Shared examinations complicating the examination schedule.
- Session-length courses becoming term-length and now subterm-length.

Mr Eaton advised that every change would require trade-offs. Our challenge is to find solutions that do not create worse problems. We are now working on a survey for all members of the campus community to better understand preferences, and priorities, and what trade-offs people preferred. We hope to bring policy revisions forward early in the next triennium. Finally, the Okanagan Senate's committee chairs have opined that one academic year for UBC was their preference.

Dr Anstee noted the 4 hour difference – over a week of instruction - for some classes in term 2 between Monday-Wednesday-Friday classes and Tuesday-Thursday scheduled classes. He advised that this was not beneficial for multi-section courses.

Dean Peacock suggested that perhaps we should stop calling the Session that starts in September “Winter”.

Dr Ross noted that within the 7-year cycle, some years were much better than others.

Dr Forwell noted that several of her colleagues had suggested moving reading week to correspond more with the school breaks.

Mr Eaton replied that this was debated at some length at the Academic Policy Committee and a break so late in the term was not viewed as optimal, but everything was open to re-examination and people could bring forward arguments again for such a change.

### **Adjournment**

There being no further business, the meeting was adjourned at 8:03 pm.

## **Appendix A: Awards Report Part 1**

### *New Awards:*

**ABORIGINAL Graduate Fellowship Tuition Award** – Recipients of Aboriginal Graduate Fellowships may, depending on other funding held by the student, receive an award equivalent to their tuition assessment. The awards are made on the recommendation of the Faculty of Graduate and Postdoctoral Studies.

**CHARTERED Professional Accountants Education Foundation Scholarship** – Two scholarships of \$2,000 each are offered annually by the Chartered Professional Accountants Education Foundation of British Columbia (CPAEF), to outstanding fourth year students completing the Bachelor of Commerce program with the Accounting option at the UBC Sauder School of Business. Preference will be given to students with demonstrated community involvement who have expressed interest in becoming a Chartered Professional Accountant and intention to enter the CPA Western School of Business immediately after graduation. The recipient must not be a recipient of any other CPAEF award in that academic year. The award is made on the recommendation of the Sauder School of Business. (First Award Available in the 2017/2018 Winter Session)

**ENTRY-to-Practice Doctor of Pharmacy Experiential Education Award** – Experiential education awards valued at \$500 each are offered annually to students in the Entry-to-Practice Doctor of Pharmacy program. To access the award, eligible students are invited to complete an application identifying the experiential education they have undertaken in the preceding 12 months. Students may receive the award only once during the course of their program. The award is made on the recommendation of the Faculty of Pharmaceutical Sciences. (First Award Available in the 2017/18 Winter Session)

**GRADUATE Global Leadership Fellowship Tuition Award** - Recipients of Graduate Global Leadership Fellowships may, depending on other funding held by the student, receive an award equivalent to their tuition assessment. The awards are made on the recommendation of the Faculty of Graduate and Postdoctoral Studies.

**GRATIAS Vobis Ago Award in Creative Writing** – Awards totalling \$1,000 are offered annually by alumnus, Jeffrey Hsu (BFA 2012) for students in any year of study pursuing a Bachelor of Fine Arts or Master of Fine Arts degree in the Creative Writing Program. The awards are made on the recommendation of the Creative Writing Program faculty members in the Faculty of Arts and, in the case of a graduate student, in consultation with the Faculty of Graduate Studies. (First Award Available in the 2016/17 Winter Session)

**Vivian LUCAS Scholarship in Acute Care Nursing** – A \$1,000 scholarship has been made available through an endowment established by Vivian Lucas (BSN 1967) in recognition of her passion for acute care nursing and education. The award is offered to an outstanding undergraduate nursing student who demonstrates excellent communication, leadership and adaptability. Preference will be given to a student interested in and with an aptitude for acute



care nursing, particularly trauma, emergency or post-operative nursing. The award is made on the recommendation of the School of Nursing. (First available in the 2017/2018 Winter Session)

*Previously-Approved Awards with Changes in Terms or Funding Source:*

**#1013 Greg Yen and Family Scholarship for Excellence in Finance** – A \$4,000 scholarship is offered **annually** by Greg Yen, BCom'87 and past president of the Commerce Undergraduate Society, to support a third year student specializing in finance at the Sauder School of Business. The recipient will be selected based on top academic standing and extracurricular involvement. Recommendation is made by the Sauder School of Business.

*Rationale for Proposed Changes – Type of Action: upon donor's request, and in collaboration with the Development Office in the Faculty, we are changing the name of the award to reflect the donor's family support to the award.*

## Appendix B: Awards Report Part 2

### *New Awards*

**BARTLETT Tree Experts Urban Forestry Award** – A \$1,000 award is offered annually by Bartlett Tree Experts for an undergraduate student enrolled in the Bachelor of Urban Forestry program in the Faculty of Forestry. Preference will be given to a well-rounded student who demonstrates leadership qualities and an interest in and passion for the field of Urban Forestry. Bartlett Tree Experts was founded in 1907 in New York and is today the largest family-held tree care company in the world. Bartlett Tree Experts strongly believes in giving back to the communities they work and live in. The award is made on the recommendation of the Faculty of Forestry. (First Award Available in the 2017/2018 Winter Session)

**Joan Wright HASSELL Prize in Visual Arts** - A \$2,000 prize has been made available through an endowment established by Hassell Construction Ltd. on behalf of her family to honour Joan Wright Hassell. The prize is for an undergraduate or graduate student who demonstrates great promise and artistic ability in painting. Joan Hassell had a passion for painting in watercolour and oils. She spent much of her free time painting and sold a few of her pieces but gifted many more, choosing to share her talent with friends and loved ones freely. The prize is awarded on the recommendation of the Department of Art History, Visual Art and Theory and, in the case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2016/2017 Winter Session)

**Lawrence Edward HASSELL Graduate Field Research Award in Fisheries** - A \$2,000 award has been made available through an endowment established by Hassell Construction Ltd on behalf of his family to honour Lawrence Edward Hassell. The award recognizes a graduate student in fisheries who is engaged in field research pertaining to sustainability. Preference will be given to a graduate student whose research is focused on the sustainability of the salmon ecosystem. Lawrence Hassell was an avid fisherman who was concerned about the depletion of salmon stocks. The award is made on the recommendation of the Institute for the Oceans and Fisheries in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2017/2018 Winter Session)

**Dr. Brian J. LAHIFFE Memorial Bursary in Dentistry** – A \$1,000 bursary has been made available through an endowment established by family, friends, and colleagues to honour the memory of Dr. Brian J. Lahiffe, a respected and dedicated teaching professional. Dr. Lahiffe was the fortunate recipient of several bursaries while he was in graduate school, which made all the difference in supporting him and his young family as he completed his specialist qualification in periodontics. The bursary is for an undergraduate student in the Faculty of Dentistry. Dr. Lahiffe's family wishes to pay the generosity forward in honour of his incredible passion and dedication. The bursary is adjudicated by Enrolment Services. (First Award Available in the 2017/2018 Winter Session)

**Tracy PENNER Memorial Scholarship in Landscape Architecture** – A \$2,300 scholarship has been made available through an endowment established by the Shamash family and friends in memory of Tracy Penner, for a first-year student in Landscape Architecture in the School of Architecture and Landscape Architecture. The recipient will demonstrate a strong commitment to sustainable design principles through their past education, work experience or community activities and intend to expand on these through their studies in landscape architecture. Tracy Penner worked as a LEED-accredited landscape architect, with the goal of creating beautiful environments for

communities to thrive in. She was an expert in the use of native plants and developed gardens and parks that supported sustainability and social and community development. The award is made on the recommendation of the School of Architecture and Landscape Architecture in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2017/2018 Winter Session)

**SOH Lim Poh Paul Foundation and the International Buddhist Society Scholarship in Buddhist Studies** - A \$10,000 scholarship is offered annually by the International Buddhist Society and the Soh Lim Poh Paul Foundation to an outstanding graduate student pursuing a masters or doctoral degree in Buddhist studies. In the case of two exceptional candidates, two scholarships of \$5,000 may be awarded. The scholarship is made on the recommendation of the Department of Asian Studies in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2017/2018 Winter Session)

**ROTHWELL Family Scholarship in Applied Animal Biology** - A \$1,000 scholarship is offered annually by alumna, Janet Rothwell (B.Sc. (Agri.) 1973) for an outstanding third-year undergraduate student who is undertaking the Applied Animal Biology degree program. Preference is given to a third-year student who intends to pursue a degree in Veterinary Medicine. The Applied Animal Biology degree will prepare them academically and practically, with hands-on experience within the farm animal sector, to apply to veterinary school. The scholarship is made on the recommendation of the Faculty of Land and Food Systems. (First Award Available in the 2016/2017 Winter Session)

**S-FRAME Software Inc. Prize in Structural Engineering** – A \$1,000 prize is offered by S-FRAME Software Inc. to the undergraduate engineering student with the highest academic standing in CIVL 228: Introduction to Structural Engineering. The prize is made on the recommendation of the Department of Civil Engineering. (First Award Available in the 2017/2018 Winter Session)

**John TIEDJE Fellowship** – Fellowships totaling \$35,000 have been made available through an endowment established by Dorothy Tiedje in memory of John Tiedje (BASc 1944, MASc 1945). The fellowships are awarded to one or more Canadian citizens or permanent residents who are enrolled in a Master of Applied Science or PhD Program in the Faculty of Applied Science or the Master of Applied Science program in Engineering Physics in the Faculty of Science, and who have achieved a first-class average or better in the most recent two years of full-time study. Fellowships will be awarded to students whose research will help create and maintain a healthy environment, with preference for research developing clean and renewable energy, advancing the electrification of the economy, reducing greenhouse gas emissions, or improving the efficiency of energy utilization. John Tiedje was a graduate of the Department of Chemical Engineering at UBC who went on to a successful career with Imperial Oil, where he was responsible for developing several new processes for converting petroleum into value-added products. He served as manager of Esso France's research lab in Mont-Saint-Aignan, France; as manager of the Esso Petroleum Canada Research Department in Sarnia, Ontario, until his retirement in 1983; and as chair of the Canadian Committee for the World Petroleum Congress. At the discretion of the Dean of Applied Science the award may be renewed for students who are in good academic standing for up to two additional years for PhD students and an additional 6 months for Master's students. The award is made on the recommendation of the Faculty of Applied Science in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2017/2018 Winter Session)

**Rick WHITE Memorial Award** – Awards totaling \$1,000 are offered annually to undergraduate or graduate students enrolled in a Statistics degree program. Students must have demonstrated

excellence in statistical science through collaboration with investigators in another discipline on a substantial application. The awards are made on the recommendation of the Department of Statistics in the Faculty of Science and, in the case of a graduate student, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2016/2017 Winter Session)

*Previously Approved Awards with Changes in Terms or Funding Source:*

**#1035 Proposed Award Title and Description: Isadore Philip Diamond Scholarship - A scholarship with a maximum award value of \$5,000 is offered annually by the Estate of Isadore Philip Diamond, who passed away in 2016. The scholarship is to be awarded to a student enrolled in an undergraduate or graduate program in the Sauder School of Business who already holds an undergraduate and/or graduate engineering degree. The award is made on the recommendation of the Sauder School of Business, and in the case of a graduate student in consultation with the Faculty of Graduate and Postdoctoral Studies.**

*Rationale for Proposed Changes – Type of Action: the family of Isadore Philip Diamond has requested that in accordance with Mr. Diamond's original wish the \$25,000 gift to UBC should be used to support an annual award instead of an endowment; in collaboration with Office of the University Counsel and the Director of Estates and Trusts at UBC, we are changing the language of the calendar description to reflect the change in the type of funding and award value.*

**#4634 Proposed Award Title and Description: Outstanding INTERNATIONAL Student Award (Vancouver) – Merit-based entrance awards ranging in value up to the full cost of tuition and fees are offered to outstanding international students entering undergraduate programs at the University of British Columbia's Vancouver campus. The awards are not renewable and are not dependent upon final grades. The awards are made on the recommendation of the International Student Initiative office.**

*Rationale for Proposed Changes – Type of Action: the dollar limit on the award has been replaced by a limit of up to the full cost of tuition and fees to allow for greater flexibility in award amounts and continued scaling as international student tuition increases.*

**#4667 Proposed Award Title and Description: INTERNATIONAL Major Entrance Scholarship (Vancouver) – Renewable scholarships totalling up to the full cost of tuition and fees over four years, are available to outstanding international students entering undergraduate programs at the University of British Columbia Vancouver campus. Preference will be given to international students who demonstrate exceptional academic achievement, intellectual promise, as well as strong extracurricular and community involvement. The scholarships are renewable for up to three years or until the first undergraduate degree is completed (whichever is the shorter period), provided the student continues to meet scholarship standing and maintains his/her status as an international student in Canada. The scholarships are made on the recommendation of the International Student Initiative Office.**

*Rationale for Proposed Changes – Type of Action: the dollar limit on the award has been replaced by a limit of up to the full cost of tuition and fees to allow for greater flexibility in award amounts and continued scaling as international student tuition increases. Language regarding selection criteria has also been amended to allow for flexibility in the inclusion of non-academic criteria such as community involvement.*

**#8063 Proposed Award Title and Description: Beer-Pop, Can-Bottle Deposit Refund Bursary – Bursaries totalling \$19,150 have been made available through an endowment established through the collection and sale of recyclable bottles and cans by Dr. W. R. Danner and**

**proceeds from his estate to provide bursaries that will benefit students studying Geological Engineering and Geological Sciences at the University. The bursaries are adjudicated by Enrolment Services.**

*Rationale for Proposed Changes – Type of Action: in collaboration with the Office of the University Counsel and the Director of Estates and Trusts at UBC, we are changing the award type and the number of awards available to reflect more closely the donor's original intentions as stated in the donor's will.*

**#8553 Proposed Award Title and Description: Dr. Ted Danner Memorial Entrance Bursary in Geology** – Bursaries totalling \$22,650 have been **made available through an endowment established** by the Estate of Dr. Ted Danner. Dr. Danner was a long time Professor and Professor Emeritus of Geology at UBC who passed away in 2012. He began teaching at UBC in 1954 and taught an introductory geology course for many years. Dr. Danner's introductory geology classes sparked an initial interest in Geology among many new students. The bursaries are to be awarded to students entering the University of British Columbia from high school **with an interest in Geology and** who are enrolled in at least **two of the following courses EOSC 110, 111 or 116**. Awards are adjudicated by Enrolment Services.

*Rationale for Proposed Changes – Type of Action: in collaboration with Enrolment Services and the Department of Earth, Ocean and Atmospheric Sciences, we are changing the language around the eligibility criteria to make the adjudication of the bursary more consistent with the original spirit of the gift.*

## **Appendix C: Curriculum Report**

### **FACULTY OF APPLIED SCIENCE**

#### *New courses:*

ENDS 101 (1) Introductory Workshop;  
MINE 406 (3) Mine Project Valuation and Risk Assessment;  
MINE 455 (3) Mine Water Management

### **FACULTY OF LAND AND FOOD SYSTEMS**

#### *New courses:*

FNH 290 (3) Introductory Topics in Food, Nutrition and Health;  
APBI 290 (3) Introductory Topics in Applied Biology

### **FACULTY OF PHARMACEUTICAL SCIENCES**

#### *New courses:*

PHRM 361 (1) Clinical Skills: Administration of Injections;  
PHAR 403 (1) Clinical Skills: Administration of Injections

### **FACULTY OF SCIENCE**

#### *New courses and revised program:*

SCIE 420 (3) Sustainability for Community and the World;  
PHYS 216 (3) Intermediate Mechanics;  
Bachelor of Science > Behavioural Neuroscience

## Appendix D: Emeritus Report

Last Name	First Name	Faculty	Emeritus Title
Barr	Susan Irene	Land and Food Systems	Professor Emeritus of Food, Nutrition and Health
Benbasat	Izak	Commerce and Business Administration	Professor Emeritus of Commerce and Business Administration
Booth	Kellogg S.	Science	Professor Emeritus of Computer Science
Boulton	Anthony John	Medicine	Clinical Professor Emeritus of Anaesthesiology, Pharmacology and Therapeutics
Danielson	Peter	Medicine	Professor Emeritus of Population and Public Health
Frinton	Vera Margarethe	Medicine	Clinical Professor Emeritus of Obstetrics and Gynecology
Fryer*	Christopher	Medicine	Clinical Professor Emeritus of Paediatrics
Hungr	Oldrich	Science	Professor Emeritus of Earth and Ocean Sciences
Mathews	John David	Medicine	Clinical Associate Professor Emeritus of Obstetrics and Gynecology
McDonald	William	Medicine	Clinical Professor Emeritus of Psychiatry
McFarlane	Paul	Forestry	Professor Emeritus of Wood Science
Nemetz	Peter	Commerce and Business Administration	Professor Emeritus of Commerce and Business Administration
Parsons	David	Medicine	Clinical Professor Emeritus of Anaesthesiology, Pharmacology and Therapeutics
Peter	Elizabeth	Medicine	Clinical Associate Professor Emeritus of Anaesthesiology, Pharmacology and Therapeutics
Pollock	Carol	Science	Professor of Teaching Emeritus of Zoology
Riddell	William Criag	Arts	Professor Emeritus of Economics
Rowley	Victor Allen	Medicine	Clinical Professor Emeritus of Radiology
Schrader	John	Medicine	Professor Emeritus of Medicine
Smith	Paul Laurence	Science	Professor Emeritus of Earth and Ocean Sciences
Suto	Melinda Jane	Medicine	Associate Professor Emeritus of Occupational Science and Occupational Therapy
Wand	Yair	Commerce and Business Administration	Professor Emeritus of Commerce and Business Administration
Warnock	Fay	Applied Science (School of Nursing)	Assistant Professor Emeritus of Nursing
Wasserman	Jerry S.	Arts	Professor Emeritus of English and Theatre
White	James	Arts	Professor Emeritus of Sociology

\*Correction to rank





3 February 2017

To: Vancouver Senate

From: Tributes Committee

Subject: Memorial Minutes

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The Tributes Committee has prepared memorial minutes for the following individuals:

**Dr. Jorgen Dahlie**

**Ms. Laurenda Daniells**

***Motion:** That Senate approve the Memorial Minutes for Dr. Jorgen Dahlie and Ms. Laurenda Daniells, that they be entered into the Minutes of Senate and copies be sent to the family of the deceased.*

Respectfully submitted,

Dr. Sally Thorne, Chair  
Senate Tributes Committee



### **Dr. Jorgen Dahlie**

Professor Emeritus Jorgen Dahlie was born in Ringsaker, Norway, in 1924. His family moved to Canada when he was five, living first in the Prairies before moving to Smithers where they homesteaded in a log cabin on the slopes of Hudson Bay Mountain.

At the outbreak of war Dr. Dahlie joined the Navy, but was struck down by tuberculosis after only a few months, and sent to a sanatorium for bedrest for a year and a half. He took advantage of this enforced bedrest to begin his university studies.

However, aged 40 Dr. Dahlie decided to become a teacher, and he earned his B.A. in Education from UBC in 1964. He then went on to complete a PhD in American Studies at Washington State University, where he focused on Scandinavians' influence on the State of Washington. Although he immersed himself in academic life – becoming the head of UBC's Department of Social and Educational Studies in 1982 and serving two terms on Senate between 1978 and 1984 – Dr. Dahlie continued to make the most of an active, outdoor lifestyle, enjoying plenty of golf and skiing.

Dr. Dahlie served as president of UBC Association of Professors Emeriti from 1991-1993, and was also a former president of the Canadian Ethnic Studies Association.

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

### **University Archivist Emerita Laurenda Daniells**

Born in Winnipeg in 1923, Laurenda Daniells attended the University of Manitoba, graduating with a degree in social work in 1945. While studying she met Roy Daniells, an English Professor, and the two were married a few years later. Ms. Daniells' first job was with the protection division of the Children's Aid Society of Winnipeg, but in 1948 the Daniells moved to Vancouver, where Roy became the head of UBC's English Department.

In between raising a family and travelling Europe and Africa, she returned to education, obtaining a Certificate of d'Etudes from Universite de Poitiers, a B.L.S and M.L.S from UBC, and a certificate of Archival Administration from Carleton. In 1970 she became UBC's first Head Archivist, a post she held until 1988, tasked with bringing order to the university's departmental records. Ms. Daniells served on Senate as a representative of the Professional Librarians from 1978 to 1981.

Daniells remained active in her retirement; at the age of 76, she successfully sailed from Ireland to Turkey, strapping herself to the mast of the boat while steering through a particularly fierce storm. In 2015 she published a memoir – *Royal Blood* – which combined stories and anecdotes



about her professional exploits, her Metis ancestors, her Winnipeg childhood, and her time as a faculty wife in the 1950s.

Laurenda Daniells also supported the Jane Guay Daniells Orris and Roy Daniells memorial scholarships at UBC.

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



## PRESIDENT'S ACTIVITY REPORT - External Groups

November 1, 2016 - January 15, 2017

Madam Jiang Zehui, Co-Chair, Board of Trustees, International Network for Bamboo and Rattan	November 1, 2016
BCBC Economic and Business Summit	November 1, 2016
BC Post Secondary Institutions Presidents - Minister Wilkinson attended	November 2, 2016
We Day Celebration Dinner with Lorne and Melita Segal	November 2, 2016
Academic All Canadians Breakfast	November 2, 2016
Vancouver Tributes Committee Meeting	November 2, 2016
Peter Meehan, St. Mark's College RE: Curriculum Proposal	November 3, 2016
Pre-Budget Session with Bill Morneau (with Adriaan de Jager)	November 3, 2016
Phone call from Lori Schmidt, CEO, Go Productivity (RE: GFCC meetings in London)	November 4, 2016
Akiko Gomyo, President, Nikkei National Museum & Cultural Centre& Roger Lemire	November 4, 2016
Vancouver Institute Dinner (H. Rosengarten contact) - IRC #2 - Woodward Library	November 5, 2016
David Farrar RE: Gravity Proposal	November 7, 2016
Lyall Knott, Q.C., Partner, Clark Wilson LLP	November 7, 2016
MoU signing with Prof. Chen Shiui, Southern Univ. of Science and Technology (China)	November 7, 2016
Dinner with Dr. Chit Chan-Gunn (Staffing with Barbara Miles) (with Wendy)	November 7, 2016
Bob Zemsky, Michael Mandl, Jack Tillman, Andrew Simpson, Anji Redish, Peter Smailes	November 8, 2016
Dominic Lai RE: Dragon Boat Canada U/16/U18 National Team (meeting with Gilles Lepine)	November 8, 2016
Phone call from Chancellor Jimmy Cheek (RE: Beverley Davenport) University of Tennessee - Knoxville	November 9, 2016
Robin Ciceri, President, RUCBC	November 9, 2016
Lunch with Ross Beaty, Board Chairman, Pan American Silver; Founder & Chairman, Alterra Power Corp (Staffing with Barbara Miles)	November 10, 2016
Julio Montaner, Director, BC CFE in HIV/AIDS	November 10, 2016
Kresge Foundation Dinner	November 13, 2016
Mitacs BOD	November 16, 2016
Lane Merrifield, CEO and co-founder of FreshGrade	November 16, 2016
Municipalities Enabling Validating Act (MEVA)/UBC Properties Briefing	November 16, 2016
Hans Jürgen Prömel & delegation from the Technical University of Darmstadt (in Germany)	November 17, 2016
Kip Woodward, Board Chair, Vancouver Coastal Health (with Dean Kelleher)	November 17, 2016
Phone Call with Marion Frenche (Greenwood Consultants) RE: reference check (Cady Short-Thompson)	November 17, 2016
Peter Allard, Robert King, and Geoff Lyster (Staffing with Barbara Miles)	November 18, 2016
Lunch with Hon. Suzanne Anton (Staffing with Philip Steenkamp and Adriaan deJager)	November 18, 2016
Editorial Board, Vancouver Sun and The Province	November 18, 2016
Music Initiative, Heart of the City Piano Program (HCPP), and Shine On Music Collaboration Concert	November 18, 2016
Alain Beaudet, President, Canadian Institutes for Health Research	November 18, 2016
Scholarship of Educational Leadership (SoEL)	November 18, 2016
Miguel A. Roig-Francolí, Distinguished Teaching Professor of Music Theory and Composition, College-Conservatory of Music, University of Cincinnati	November 21, 2016
Kurt Takamine, Academic Dean/Chief Academic Officer/Professor At APOU	November 21, 2016
Craig Keilberger & Bryanna Baker (WE Foundation)	November 24, 2016
Joe Gallagher, CEO, First Nations Health Authority and Janene Erickson (with Dean Kelleher and Linc Kesler)	November 25, 2016
Soledad Barrio & Noche Flamenca Concert with Michael & Sonja Koerner (Staffing with Barbara Miles)	December 2, 2016
Lunch with Peter Zandstra, University Professor & Canada Research Chair, Stem Cell Bioengineering	December 9, 2016
Federal Growth Council	December 9, 2016

Call with Raghwa Gopal, CEO, Accelerate Okanagan	December 9, 2016
Breakfast with Philip Lee, Sun Hing Group of Companies; Director, Simon KY Lee Foundation; and Mabel Lee	December 11, 2016
Caleb Chan, President & CEO, Burrard International Holdings Ltd	December 11, 2016
Ian Fok and Joseph Yu, Fok Ying Tung Group	December 11, 2016
Dinner with Cynthia Li Qiao, Li Ka Shing Foundation	December 12, 2016
UBC Hong Kong Donor Dinner with the President	December 12, 2016
Prof SHI Yigong, University Professor, School of Life Sciences, Tsinghua University	December 15, 2016
Roger Wang, Director of Student Voice, BC Student Alliance	December 21, 2016
Santa to call Dr. Martha Piper RE: Strategic Plan	January 4, 2017
Fran Watters and Bill Aiello (re. ALDP)	January 4, 2017
The President of the University of Central Asia	January 10, 2017
George and Jane Hungerford	January 11, 2017
Cindy McIntyre - Universities Canada	January 12, 2017
GNW Shareholders Meeting	January 12, 2017
Andrius Kazlauskas, Professor, Ophthalmology, Harvard Medical School, Senior Scientist, SERI, Schepens Eye Research Institute	January 12, 2017
Metro Vancouver Advisory Group to the Regional Prosperity Initiative Steering Committee	January 12, 2017
Conversations that Matter with Stuart McNish	January 13, 2017
Lunch with Mr. Peter Dhillon, OBC (BA'88), President & CEO, Richberry Group of Companies, Chairman, Ocean Spray Cranberries Inc. (Staffing with Barbara Miles)	January 13, 2017



THE UNIVERSITY OF BRITISH COLUMBIA

## PRESIDENT'S ACTIVITY REPORT - Muni. & Prov. Government

November 1, 2016 - January 15, 2017

Intro. Meeting: Mike Harcourt, Former Premier of British Columbia, Former Mayor of Vancouver	January 16, 2017
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## PRESIDENT'S ACTIVITY REPORT - Fed. & Intl. Government

November 1, 2016 - January 15, 2017

Pre-Budget Session with Bill Morneau (with Adriaan de Jager)	November 3, 2016
Federal Growth Council	December 9, 2016
Vice Minister The Honorable HAO Ping	December 15, 2016
Dinner with Minister ZHANG Jianguo of State Administration for Foreign Experts Affairs (SAFEA) (with UBC delegation)	December 16, 2016



## PRESIDENT'S ACTIVITY REPORT - Travel

November 1, 2016 - January 15, 2017

Austin, Texas: Association of Public and Land-grant Universities (APLU); and Coalition of Urban Serving Universities (USU)	November 12 - November 15
London, England: GFCC: 2016 Global Innovation Summit   Sherry Coutu   Imperial College London   DAE Close Friends of UBC	November 27 - December 1
Toronto: Alexandra Stewart   USU Health Steering Committee teleconference   Rob Prichard   Michael & Sonja Koerner	December 1 - December 3
Hong Kong: Philip and Mabel Lee   Caleb Chan   Ian Fok and Joseph Yu   Cynthia Li Qiao   UBC Hong Kong Donor Dinner with the President   Sheldon Trainor and Anthony Cheng   Lei Zhang and Darren Huston   Raymond & Money Lee   Ted Lipman   Hong Kong alumni UBC Christmas Dinner   Peter Mathieson & Isabella Wong   Chris Tremewan   Edwin Leong Recognition Event	December 11 - December 15
Beijing: UBC Alumni and Friends Reception in Beijing   Vice Minister The Honorable HAO Ping   SHI Yigong   ZHANG Jianguo of State Administration for Foreign Experts Affairs (SAFEA)	December 15 - December 16





## PRESIDENT'S ACTIVITY REPORT - Speeches/Events

November 1, 2016 - January 15, 2017

BCBC Economic and Business Summit	November 1, 2016
We Day Celebration Dinner with Lorne and Melita Segal	November 2, 2016
Academic All Canadians Breakfast	November 2, 2016
Vancouver Institute Dinner (H. Rosengarten contact) - IRC #2 - Woodward Library	November 5, 2016
SJO Keynote Speech: Department of Medicine Research Expo	November 9, 2016
Gift announcement for the MOA Masterworks Gallery (Staffing with Barbara Miles)	November 10, 2016
Richmond Alumni Roundtable and In-Conversation with Prof. Santa J. Ono (with Barbara Miles and Jeff Todd)	November 10, 2016
Remembrance Day Ceremony	November 11, 2016
Kresge Foundation Dinner	November 13, 2016
Speaker: "Cross Broader Collaborations: The North American Zone of Knowledge"	November 15, 2016
Science 113 Lecture - First Year Seminar in Science	November 17, 2016
Life Science Research Night: Keynote Speaker	November 17, 2016
Dinner with Aaron Bailey and Students	November 17, 2016
Music Initiative, Heart of the City Piano Program (HCPP), and Shine On Music Collaboration Concert	November 18, 2016
Scholarship of Educational Leadership (SoEL)	November 18, 2016
Installation Ceremony	November 22, 2016
Forum: Celebrating Discovery: Four Visionary Thinkers (Staffing with Herbert Rosengarten)	November 22, 2016
Installation Breakfast	November 22, 2016
Installation Concert	November 22, 2016
Fall Graduation - Ceremony #1	November 23, 2016
Fall Graduation - Ceremony #2	November 23, 2016
Fall Graduation - Ceremony #3	November 24, 2016
Fall Graduation - Ceremony #4	November 24, 2016
A Ca-ristmas Carol	December 4, 2016
UBC Hong Kong Donor Dinner with the President	December 12, 2016
Cocktails and Conversation (Joint DAE and UBC Board Holiday Event) -- with Wendy, Juliana and Sarah (Staffing with Barbara Miles)	December 12, 2016
The Stephens' Annual Carol Party 2016	December 22, 2016
Class Lecture: Arts Studies 201 (75 Students from Ritsumeikan University)	January 10, 2017
Dinner for University Killam Professors	January 10, 2017
Canadian Club Luncheon	January 11, 2017
Conversations that Matter with Stuart McNish	January 13, 2017
WinterConnections - An evening event for first year international graduate students	January 13, 2017
Closing Ceremony: Arts Undergraduate Society Humanities & Social Sciences Conference	January 14, 2017
Illuminate Undergraduate Co-op Conference -- Arts Co-Op Program	January 14, 2017



## PRESIDENT'S ACTIVITY REPORT - Student Events/Meetings

November 1, 2016 - January 15, 2017

Academic All Canadians Breakfast	November 2, 2016
FILMING for Gamma Sigma Alpha UBC	November 8, 2016
Ubysssey Interview with Hana Golightly: Advance Article re. Installation (with Susan Danard)	November 8, 2016
SJO Keynote Speech: Department of Medicine Research Expo	November 9, 2016
Ava Nasiri (with Louise Cowin)	November 10, 2016
Nicholas AJ Dawson, B.Sc., Student Senator At-Large and Lina Castro, Student Senate Caucus Co-Chair	November 17, 2016
Science 113 Lecture - First Year Seminar in Science	November 17, 2016
Life Science Research Night: Keynote Speaker	November 17, 2016
Dinner with Aaron Bailey and Students	November 17, 2016
Music Initiative, Heart of the City Piano Program (HCPP), and Shine On Music Collaboration Concert	November 18, 2016
Scholarship of Educational Leadership (SoEL)	November 18, 2016
Cello rehearsal with students (for Installation)	November 21, 2016
Fall Graduation - Ceremony #1	November 23, 2016
Fall Graduation - Ceremony #2	November 23, 2016
Fall Graduation - Ceremony #3	November 24, 2016
Fall Graduation - Ceremony #4	November 24, 2016
Mark MacLachlan "Pump you Up" video - for Dept. of Chemistry holiday skit	November 25, 2016
Interview with Julia Burnham, Ubysssey	December 9, 2016
Roger Wang, Director of Student Voice, BC Student Alliance	December 21, 2016
Class Lecture: Arts Studies 201 (75 Students from Ritsumeikan University)	January 10, 2017
WinterConnections - An evening event for first year international graduate students	January 13, 2017
Closing Ceremony: Arts Undergraduate Society Humanities & Social Sciences Conference	January 14, 2017
Illuminate Undergraduate Co-op Conference -- Arts Co-Op Program	January 14, 2017



## PRESIDENT'S ACTIVITY REPORT - Media Interviews

November 1, 2016 - January 15, 2017

BC Global TV Interview	November 8, 2016
FILMING for Gamma Sigma Alpha UBC	November 8, 2016
Ubyyssey Interview with Hana Golightly: Advance Article re. Installation (with Susan Danard)	November 8, 2016
Vancouver Sun Facebook Live Event	November 9, 2016
Editorial Board, Vancouver Sun and The Province	November 18, 2016
Mark MacLachlan "Pump you Up" video - for Dept. of Chemistry holiday skit	November 25, 2016
Interview with Julia Burnham, Ubyyssey	December 9, 2016
Conversations that Matter with Stuart McNish	January 13, 2017



To: Senate  
From: Academic Policy Committee  
Date: 30 January 2017  
Re: Renaming of the Faculty of Law as the Peter A. Allard School of Law

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At its last meeting on 6 December 2016, the Board of Governors approved the following resolution, effective retroactively to 2 December 2014:

*That the UBC Board of Governors affirm the exclusive naming of the Faculty of Law in perpetuity, without affecting its status as a Faculty, as the Peter A. Allard School of Law, in recognition of the contributions of alumnus Mr. Peter A. Allard, Q.C., an exceptional donor to the University.*

The Senate Academic Policy Committee was alerted to this resolution by the Provost, and noted the possible conflict between the resolution approved by the Board and the two resolutions approved by the Senate regarding the Faculty of Law and the use of the Peter A. Allard School of Law name. The Academic Policy Committee has considered the matter, including the constitutional implications for the University, issues around clarity, consideration of other academic units, and appreciation for the support of Mr Allard shown towards the Faculty and the University. After consideration, the Committee has come to the conclusion that an exception to past practice should be made, and that the formal name of the Faculty should be changed to concur with the resolution of the Board and the gift agreement signed with the donor.

The Committee would therefore recommend:

*That, while remaining a faculty of the University, the Faculty of Law be renamed the Peter A. Allard School of Law effective 2 December 2014 and that all official references to the name of the Faculty be amended to reflect the new name in accordance with the gift agreement signed between the University and Mr Allard on 7 December 2014; and*

*That the Senate resolutions of 21 January 2015 and 20 April 2016 regarding the alternative use of the name "Peter A. Allard School of Law" for the Faculty be rescinded, and that the minutes of those meetings be amended to include a note referencing the renaming of the Faculty as the Peter A. Allard School of Law.*

Respectfully submitted,  
Paul G. Harrison, Chair



3 February 2017

From: Senate Academic Policy Committee

To: Senate

Re: Proposed Academic Regulations for Professional Masters Degrees in Commerce and Business Administration

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The Faculty of Commerce and Business Administration has proposed in the attached two-column form Calendar language that formalizes academic regulations for all professional masters degrees in Business. Currently, the listed programs, being graduate programs, are guided by the policies and academic regulations specified by the Faculty of Graduate and Postdoctoral Studies. However, professional masters programs in the Faculty (e.g., MBA, MM, MBAN) are not administered by the Faculty of Graduate and Postdoctoral studies and there is a need for these programs to specify their own policies.

In the attached, there are some regulations that remain consistent with those set out in the Graduate and Postdoctoral Studies' Academic Regulations section of the Calendar, and there are some regulations specific to the professional masters degrees in business. For clarity and ease of reference for students, the proposed entries will list all of academic regulations for the listed programs are in one place. However, the proposed regulations do not apply to the Master of Science in Business Administration because this program is administered by the Faculty of Graduate and Postdoctoral Studies.

The Senate Academic Policy Committee has reviewed the proposed regulations and recommends the following:

**Motion:** *"That Senate approve the academic regulations for professional masters degrees proposed by the Faculty of Commerce and Business Administration as set out in the attached two-column form."*

Respectfully submitted,

Dr. Paul G. Harrison, Chair  
Senate Academic Policy Committee

**UBC Curriculum Proposal Form  
Change to Course or Program****Category: (1)**

<b>Faculty:</b> Commerce & Business Administration <b>Department:</b> <b>Faculty Approval Date:</b> December 8, 2016 <b>Effective Session (W or S):</b> Winter <b>Effective Academic Year:</b> 2016	<b>Date:</b> September 30, 2016 <b>Contact Person:</b> Kin Lo / Hilary Geise <b>Phone:</b> 2-8430 / 7-1732 <b>Email:</b> <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a> / <a href="mailto:hilary.geise@sauder.ubc.ca">hilary.geise@sauder.ubc.ca</a>
<b>Proposed Calendar Entry:</b>  <b>Professional Master's Degrees</b>  <b>Contents</b> <a href="#">Introduction</a> <a href="#">Academic Regulations [insert link]</a> <a href="#">Master of Business Administration</a> <a href="#">International Master of Business Administration</a> <a href="#">Executive Master of Business Administration</a> <a href="#">Master of Business Analytics</a> <a href="#">Master of Management</a> <a href="#">Dual Degree Program Option: J.D./M.B.A.</a> <a href="#">Dual Degree Program Option: UBC M.B.A./Yale M.A.M.</a> <a href="#">Joint M.B.A./M.A.A.P.P.S.</a> <a href="#">Contact Information</a>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,0</a>  <b>Present Calendar Entry:</b>  <b>Professional Master's Degrees</b>  <b>Contents</b> <a href="#">Introduction</a> → <a href="#">Master of Business Administration</a> → <a href="#">International Master of Business Administration</a> → <a href="#">Executive Master of Business Administration</a> → <a href="#">Master of Business Analytics</a> → <a href="#">Master of Management</a> → <a href="#">Dual Degree Program Option: J.D./M.B.A.</a> → <a href="#">Dual Degree Program Option: UBC M.B.A./Yale M.A.M.</a> → <a href="#">Joint M.B.A./M.A.A.P.P.S.</a> → <a href="#">Contact Information</a> → → <b>Type of Action:</b> Add new item to table of contents.  <b>Rationale for Proposed Change:</b> New academic policies are being formalized for all Professional Master's Degrees in Business.

**URL:** Homepage>>Faculties, Colleges, and Schools>>The Faculty of Commerce and Business Administration>>Professional Master's Degrees>>Academic Regulations

**Proposed Calendar Entry:**

## Academic Regulations

Professional Master's Degrees at the Sauder School of Business follow the policies of UBC and the Faculty of Graduate and Postdoctoral Studies, with the exception of those listed below.

1. [Academic Standing & Grading Practices](#)
2. [Auditing Courses](#)
3. [Credits Earned Outside of the Degree Program](#)
4. [Examinations](#)
5. [Overloading](#)
6. [Professionalism, Attendance & Behaviour](#)
7. [Transferring between Professional Master's Degrees in Business](#)
8. [Withdrawals, Reinstatement & Readmission](#)

These policies do not apply to research-based programs such as the Master of Science in Business Administration.

### 1. Academic Standing & Grading Practices

#### 1.1 Grading

Percentage grades for courses translate to letter grades as follows:

PERCENTAGE (%)	LETTER GRADE
90-100	A+
85-89	A
80-84	A-
76-79	B+
72-75	B

**URL:** N/A

**Present Calendar Entry:** N/A

#### Type of Action:

Create new page in academic calendar for Academic Policies for Professional Master's Degrees in Business.

#### Rationale for Proposed Change:

New academic policies are being formalized for all Professional Master's Degrees in Business. Currently, the listed programs, being graduate programs, rely on the policies specified by the Faculty of Graduate and Postdoctoral Studies (FoG+PS). Some of the proposed policies are consistent with those of FoG+PS, while others vary. There are also proposed policies that are not covered by those in FoG+PS. For clarity, all of these policies for the listed programs are best located in one place.

The described policies apply to all Commerce professional master's programs as indicated in the first paragraph. These programs are administered by the Faculty of Commerce. The policies do not apply to the Master of Science in Business Administration because this program is administered by FoG+PS.

Note that the "Academic Periods" are not yet defined in the calendar, but we have identified the appropriate [page](#) and we will be submitting this information to be added to that page. Currently, the Calendar already contains the course drop/withdrawal dates for the Periods [here](#).

68-71	B-
64-67	C+ (Minimal pass)
60-63	C (Minimal pass)
0-59	F (Fail)

**1.2 Passing Grade (60% and above)**  
A minimum grade of 60% must be achieved in a course in order to receive credit towards a master's degree. This minimum applies to both required and elective courses.

**1.3 Minimal Pass Grade (60 – 67%)**  
A grade of C or C+ (between 60 and 67%, inclusive) is a minimal pass in a course. A maximum of 6 credits of minimal pass grades can be counted towards a master's degree.

**1.4 Failing Grade (Below 60%)**

(a) Any grade below 60% is a Fail (F). If a required course is failed, it must be repeated (it cannot be replaced with a substitute course). A failed elective course may be replaced with a substitute course. Students with a failed course should review their program requirements and speak with a Program Manager/Advisor to determine how to make up for a failed course.

(b) Students who receive a failed or minimal pass grade will receive a letter from the Robert H. Lee Graduate School cautioning that they are at academic risk and outlining requirements for continuation in the program. A meeting with a Robert H. Lee Graduate School Program Manager/Advisor will also be required to discuss program requirements and to determine any needed actions.

**1.5 Academic Standing - Required to Withdraw & Academic Performance Evaluations**

(a) A student will be required to withdraw from the program under the following circumstances:

- failed in more than 3 credits of courses, **or**
- failed in 3 credits of courses and earned more than 3 credits of minimal pass, **or**
- failed in 1.5 credits of courses and earned more than 4.5 credits of minimal pass, **or**
- more than 6 credits with grades of minimal pass.

	Below 60%	60-67% Range
	>3.0 credits	



Students will be required to withdraw from the program for any of the following conditions:	OR 3 credits plus OR 1.5 credits plus OR	> 3.0 credits > 4.5 credits > 6.0 credits
<p>(b) The Robert H. Lee Graduate School will conduct academic performance evaluations of students who are classified as full-time students at the end of each academic period as defined by the program schedule. (See dates for academic periods <a href="#">here</a>.) If a student does not meet the requirement to continue in the program, the student will be required to withdraw at that time.</p> <p>(c) Academic performance evaluations for students who are classified as part-time students will be conducted after the completion of each course. If a student does not meet the requirement to continue in the program, the student will be required to withdraw at that time.</p> <p>(d) A student who is required to withdraw will not be permitted to attend classes during any appeal processes.</p>		
<h2>2. Auditing Courses</h2>		
<p>Auditing courses within the designated degree program is not permitted.</p>		
<p><b>2.1</b> Auditing courses in professional masters programs is not permitted.</p>		
<p><b>2.2</b> Subject the procedures below, students may be permitted to review BAXX courses without a formal record on the official academic transcript.</p>		
<p><b>2.3</b> Procedure to informally review a course:</p>		
<p>(a) The ability to review a course is at the instructor's discretion, and only allowed when registration numbers have not exceeded the maximum class size. Students must obtain instructor permission prior to the start of the course.</p>		
<p>(b) Students must inform a Program Manager/Advisor at the Robert H. Lee Graduate School of the course name and number to be reviewed.</p>		
<p><b>2.4</b> If permitted to audit, students may be obliged to fully participate in all group work. The instructor determines</p>		

required participation levels. Students wishing to review a course should carefully consider the additional time commitment required and the effect it might have on academic performance in other courses. This additional time commitment would not be considered as an extenuating circumstance in an appeal of academic standing.

**2.5** If permitted to review a course, students are expected to attend all classes and abide by the Professionalism, Attendance and Behaviour Policy [{INSERT LINK to Section 6 below}](#)

**2.6** Students may be required to purchase learning materials when reviewing a course.

**2.7** Students reviewing a course may have access to the online learning management system with the instructor's approval.

### **3. Credits Earned Outside of the Degree Program**

**3.1** Advanced Transfer Credits (credits earned prior to entering the professional master's program) are not permitted in professional master's programs in the Robert H. Lee Graduate School.

**3.2** After completion of a substantial portion of their program, students may complete up to 35% of their program credits through:

- an official Robert H. Lee Graduate school exchange or study abroad program
- approved UBC courses outside of the designated program
- an approved program of study at another comparable institution

Students should consult with a program Manager/Advisor to determine when they become eligible for these alternatives.

**3.3** A maximum of 6 credits may be taken at the undergraduate 300/400 level; the remaining credits must be taken at the graduate level 500+ (UBC equivalent). All courses must be part of a recognized degree program; executive education, professional development or continuing education courses are not eligible.

**3.4** Any courses outside of the student's graduate program must be approved by the Robert H. Lee Graduate School prior to registering. Students can contact a Program Manager/Advisor to discuss any options. To gain permission, students must provide a course outline for the desired course as well as information about career goals and how the course would enhance the academic program.

**3.5** Students are responsible for any additional course or registration fees associated with courses outside the professional master's program.

#### **4. Examinations**

**4.1** Exams are administered by the Robert H. Lee Graduate School. The Graduate School will issue the exam schedule.

**4.2** For the purposes of this policy, all other final assignments and deliverables due during the exam period, such as presentations and projects, are considered examinations.

**4.3** All exams must be undertaken at the time stated in the exam schedule. Exams will **not** be re-arranged to accommodate students' extracurricular activities or personal circumstances such as:

- Vacation
- Personal travel
- Weddings and special occasion events

Refer to the UBC's policy on [academic concessions](#) for valid reasons for requests for alternate exam scheduling.

**4.4** Students must not approach instructors to request exam concessions or alternate exam sittings; all exam issues are to be discussed with the respective Program Manager/Advisor.

**4.5** Students must notify the Robert H. Lee Graduate School prior to the start of the exam if they are too ill to write. A doctor's note must be provided prior to the scheduling of a new exam date. Exams will be deferred until the student has returned to good health. A new exam date will be set by the Graduate School.

<p><b>4.6</b> Students with <a href="#">examination hardship or clashes, as defined by UBC policy</a>, must contact the Program Manager/Advisor by the communicated deadline to organize alternate exam sittings.</p> <p><b>4.7</b> Supplemental and retake exams are not permitted in the Robert H. Lee Graduate School.</p> <p><b>4.8</b> <a href="#">UBC Academic Regulations on student conduct during examinations</a> state that no candidate shall be permitted to enter the exam room after the expiration of one-half hour from the scheduled starting time, or to leave during the first half hour of the exam. No additional time will be given to students who arrive late, but within the first half hour of the exam.</p> <p><b>4.9</b> Grades are normally submitted to the Faculty/Student Service Centre within <b>seven</b> working days following the date of the final exam, and grades for exams held in the last two days of the exam period are due within five working days.</p> <p><b>4.10</b> Instructors must keep all completed exams on file for a period of one year.</p> <p><b>4.11 Additional Policies for <u>Full-time</u> Programs (Full-time Master of Business Administration, Master of Business Analytics and Master of Management):</b></p> <p>(a) Exams, papers, and assignments must be completed by the end of the exam period for the enrolled program. The Robert H. Lee Graduate School will set the exam schedule in consultation with instructors and students to avoid examination hardship. The Robert H. Lee Graduate School will endeavour to schedule all exams between Monday and Friday, but due to conflicts and classroom availability, some exams may be scheduled on Saturday. Students must keep the Saturday of the exam period free.</p> <p>(b) Any student with Examination Hardship defined as <u>THREE or more</u> exams within a 24-hour period should report this to the Robert H. Lee Graduate School by the communicated deadline. Failure to notify the School of 3 exams within 24 hours by the deadline given may result in students not being able to have an alternate exam sitting.</p> <p><b>4.12 Additional Policies for <u>Part-time</u> Programs (Part-time Master of Business Administration and International Master of Business Administration):</b></p>	
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(a) All examinations, papers and assignments must be completed by the date scheduled on the respective program calendar. For PT MBA, this is usually a Saturday or Sunday. For the IMBA, this is usually a Friday. The exam date is set by the Robert H. Lee Graduate School and published to students in advance of the beginning of each module.

(b) Essential business travel is the only legitimate reason to be permitted an alternate exam sitting. Requests for alternate sittings are to be sent directly to the Program Manager/Advisor; instructors do not approve alternate sittings. A note from the student's employer detailing the essential business travel (dates/times/location), and proof of travel is required. When approved, alternate sittings will be offered before the official exam date/time.

## 5. Overloading

**5.1** The term "overloading" refers to taking additional courses beyond the standard credit value of the courses associated with a program.

**5.2** An overload will be permitted under the following conditions:

(a) The student attained an overall academic average of at least 80% to-date, including all attempted courses.

(b) There are seats available in the requested overload course.

Additional restrictions for each program are listed below.

**5.3** Overloading is not acceptable as an extenuating circumstance in an appeal on academic standing.

### **5.4 Full-Time Master of Business Administration Students:**

(a) Overloading is only permitted in Periods 4, 6, and 7 to a maximum of 1.5 credits per period. (See dates for academic periods [here](#).)

(b) Overloading of courses prior to going on exchange does not exempt students from taking a full course load at their exchange partner school. Our exchange agreements are predicated upon students participating and contributing fully

<p>at their exchange partner school, and this includes taking a full course load.</p> <p>(c) For timelines and application to overload, refer to the Full-time Master of Business Administration program site.</p> <p><b>5.5 Part-Time Master of Business Administration &amp; International Master Business Administration:</b></p> <p>(a) Overloading is only permitted after program Year 1.</p> <p>(b) A maximum overload of 1.5 credits will be permitted per winter term or summer session.</p> <p>(c) For timelines and application to overload, refer to the Part-time MBA or IMBA program site.</p> <p><b>5.6 Master of Management:</b></p> <p>Overloading is generally not permitted. In exceptional circumstances, overloading may be permitted with the approval of the Assistant Dean.</p> <p><b>5.7 Master of Business Analytics:</b></p> <p>Overloading is generally not permitted. In exceptional circumstances, overloading may be permitted with the approval of the Assistant Dean.</p> <p><b>6. Professionalism, Attendance &amp; Behaviour</b></p> <p><b>6.1 General Expectations &amp; Scope</b></p> <p>(a) The Robert H. Lee Graduate School admits candidates who demonstrate the potential to become both business leaders and ambassadors of UBC and the Sauder School of Business. In accepting our offer of admission to a graduate program at the Sauder School, students commit to upholding the highest standard of professional behaviour and integrity in all their interactions as graduate students.</p> <p>(b) As part of this commitment to professionalism, students are expected to demonstrate respect for faculty, staff and fellow students, and for the University and its property. This Section describes the required behaviour towards and during classes and activities organized or supported by the Robert H. Lee Graduate School, and the conduct expected during</p>	
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<p>interactions with faculty and staff, and fellow students, regardless of the medium or occasion.</p> <p>(c) These standards of professionalism apply also to students outside of the Robert H. Lee Graduate School who enroll in BAXX courses. This policy is provided to all such students at the start of each course.</p> <p>(d) As members of the UBC community, students are expected to familiarize themselves with UBC's standards for <a href="#">Academic Integrity</a> and uphold those standards throughout their program.</p> <p><b>6.2 Attendance</b></p> <p>(a) Excepting extenuating circumstances (e.g. documented illness, documented family emergency) per <a href="#">UBC's policy on Academic Concession</a>, students are expected to attend 100% of their scheduled class hours. Absent students limit their own academic potential, and that of their classmates, and cause unnecessary disruption to the learning environment.</p> <p>(b) In cases of absence without academic concession being granted by the Robert H. Lee Graduate School, due dates for assignments remain unchanged and instructors may deduct participation points for missed classes.</p> <p>(c) Examinations for courses in full-time programs will not be rescheduled for professional, personal, or co-curricular conflicts.</p> <p>(d) Provided certain conditions are met, examinations for courses in part-time programs may be rescheduled due to <u>essential business travel</u> required by the student's employer. Students should refer to the policy on <i>Examinations</i> {<a href="#">INSERT LINK to Section 4</a>} for further details.</p> <p>(e) Students who miss a class due to illness must inform their instructors at the earliest opportunity. If the illness is likely to cause absence from more than one class, students must contact the Program Manager/Advisor, who will be able to provide advice and support. A medical note from a licensed, local doctor is required if more than 20% of the scheduled class hours for a course are missed, or if assessments need to be rescheduled due to illness.</p> <p>(f) Students requesting an academic concession for extenuating circumstances must meet with a Program</p>	
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Manager/Advisor, who will determine the eligibility of the request and any needed documentation. The instructor will work with the Program Manager/Advisor to identify the best course of action.

(g) Students missing more than 20% of the total scheduled class hours for a course (including classes held during the add/drop period) without having received an academic concession will be withdrawn from that course. Such a withdrawal results in a “W” if it occurs within the [withdrawal with “W” period](#). If this course withdrawal is after the withdrawal with “W” period, the student will receive up to 50% and an “F” standing for the course on the transcript.

(i) It should be noted that ‘signing in’ for another student at a scheduled class is considered academic misconduct, and such cases will be investigated in accordance with UBC’s procedures for [Academic Misconduct](#).

### **6.3 Impact of Non-Attendance on Program Completion**

(a) Students who are withdrawn from a course due to non-attendance will be advised on the alternatives available to complete the necessary credits. Depending on the program, the nature of the course(s), and the time of year, these alternatives may be limited and graduation may be delayed.

(b) Students will not normally be able to replace credits with courses from outside of the degree for which they are registered. Exceptions may be made at the discretion of the Assistant Dean based on the appropriateness of the proposed alternative.

### **6.4 Tardiness**

(a) As with any professional environment, students are expected to arrive for classes and activities on time and fully prepared to engage. Students who are late for a class or activity may be refused entry at the discretion of the instructor or activity lead. In such cases, the student will be treated as absent for that class and fall under the provisions for attendance stated above.

(b) Students arriving later than halfway through a scheduled class will be treated as absent for that class and fall under the provisions for attendance stated above, even if the instructor allows them to continue in the classroom.



## 6.5 Use of Electronic Devices in Class

(a) Research shows that students' use of laptops in class has negative implications for the learning environment, including reducing their own grades and the grades of those sitting around them. As a result, the Robert H. Lee Graduate School has a 'lids down' default in all its classes. This means that students should only open their laptops when asked to by the instructor in order to undertake a specific activity.

(b) Similarly, cell phones, tablets, and other personal technology must be turned off during class and stowed away.

(c) Students who do not follow the School's policy in this regard may be required to leave the room for the remainder of the class, so that they do not distract others. In such cases, students will be treated as absent for that class and fall under the provisions for attendance stated above.

## 6.6 Behaviour towards faculty, staff and fellow students

(a) As with any professional environment, students are expected to demonstrate respect for their colleagues at all times, including faculty, staff, and fellow students. The Robert H. Lee Graduate School expects all its students, as future business leaders, to meet their obligations, conduct themselves professionally, and communicate courteously.

(b) Students should also be aware of the University's [Code of Conduct](#) and the related discipline measures. Any conduct on the part of a student that has an adverse effect on the integrity of the School or the University, or cause harm to its members or the general public, will be subject to the principles set out in the *Code of Conduct*.

## 7. Transferring between Professional Master's Degrees in Business

**7.1** Should a student wish to change degree programs within the Robert H. Lee Graduate School, the following process must be followed:

(a) The student must complete the full application package and process for the desired program.

(b) If admitted, a maximum of 12 credits or up to 40% of the total number of degree credits of previously completed

coursework may be applied toward the new degree requirements, provided the courses were completed no earlier than five years from the date of readmission and the courses are applicable to the new degree.

(c) Courses eligible for transfer must have been awarded a grade of at least B (74%).

(d) The student must voluntarily withdraw from the current program before beginning the new program.

(e) Normal program requirements apply to the new program, as does the standard time allowed for degree completion.

## **8. Withdrawals, Reinstatement & Readmission**

### **8.1 Voluntary Withdrawal**

(a) A student wishing to withdraw from the University must notify the Robert H. Lee Graduate School in writing. The withdrawal becomes effective once officially approved in writing by the School. The academic record will indicate "Voluntary Withdrawal." The academic record will show the date of withdrawal and a standing of "W" in all courses not completed on the approval date. Any refund of tuition and fees will follow the University's refund policy. Fees will continue to be assessed until the School grants written approval for the voluntary withdraw.

(b) A student who voluntarily withdraws may return to the program through readmission, as outlined in the Faculty of Graduate and Postdoctoral Studies [policies](#). The Robert H. Lee Graduate School does not permit reinstatements.

### **8.2 Mandatory Withdrawal (Required to Withdraw)**

(a) A student who is required to withdraw will not be permitted to attend classes during an appeal process.

(b) A student who is required to withdraw will not be reinstated or readmitted to the program.

(c) A student who is required to withdraw may appeal to the Dean of the Faculty, and if unsuccessful, may finally appeal to the Senate's Committee on Appeals on Academic Standing.



3 February 2017

To: Vancouver Senate  
From: Admissions Committee  
Re: **2017/2018 Enrolment Targets**

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The Vancouver Senate Admissions Committee has reviewed the 2017/2018 Enrolment Targets as set out in the attached and presents these for your approval.

Therefore, the Admissions Committee recommends the following;

***Motion:*** *That Senate approve and forward to the Board of Governors for approval the 2017/2018 Enrolment Targets as set out in the attached document.*

Respectfully submitted,

Dr. Robert Sparks, Chair  
Senate Admissions Committee



THE UNIVERSITY OF BRITISH COLUMBIA

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OFFICE OF THE PROVOST AND VICE-PRESIDENT ACADEMIC

Phone 604 822 1261  
Fax 604 822 3134

January 19, 2017

To: Members of the Senate Admissions Committee

From: Pam Ratner, Vice-Provost and AVP Enrolment &amp; Academic Facilities

**Re: 2017-18 Academic Year Undergraduate Enrolment Targets -- UBC Vancouver**

---

I am very pleased to provide the enrolment projections (by fiscal year) and intake targets (by academic year), based on the strategic-planning decisions of the Faculties. Specific intake targets for undergraduate programs are set by the Offices of the Deans of all Faculties, in consultation with the Provost's Office, the Office of Planning and Institutional Research (PAIR), Enrolment Services, and the International Student Initiative. Intake targets take into account: the provincial government's requirements regarding overall domestic student enrolment (measured as FTEs); the University's strategic goals; and both the opportunities and capacities of the Departments and Schools to provide excellent undergraduate education and appropriate levels of support for students.

**FTE Enrolment by Fiscal Year**

In the current fiscal year (FY2016/17), UBC Vancouver's undergraduate and medical residency full-time equivalent (FTE) enrolment is estimated to be 38,939, of which 30,898 (79.3%) are domestic.<sup>1</sup> This is 1,244 FTEs (4.2%) above our government-funded level of 29,654 FTEs, and about 158 FTEs (0.5%) lower than the previous year. Undergraduate domestic student enrolment is expected to increase slightly in the next year (FY2017/18) (354 FTEs; 1.1%). In the absence of additional government funding, a gradual decrease is planned for the following years, such that enrolment will be maintained at about 104% of government-funded levels (see Table 1). The Faculty-specific domestic and international undergraduate and medical resident FTE enrolments are shown in Tables 2A and 2B, respectively.

**Undergraduate Headcount Intake Targets and Actuals by Academic Year**

The domestic undergraduate student intake targets (in headcounts) for the forthcoming 2017/18 academic year remain principally unchanged from 2016/17 (4.8% or 436 fewer students; see Tables 3A and 3B). The largest changes are in the Faculty of Arts, which plans to increase their domestic undergraduate student intake target by 1.8% (49 students), and the Faculty of Science, which plans to reduce their domestic undergraduate intake target by 3.4% (60 students) over the 2016/17 intake target (see Table 3A).

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<sup>1</sup> Projected from November 2016 to March 2017.



With respect to the international (ISI) undergraduate student intakes, the target for 2017/18 is 3,362 students, 244 (7.8%) more than were targeted in 2016/17. The Faculties of Applied Science, Arts, Forestry, Land and Food Systems, and Science plan to raise their ISI targets, but by between 16 and 49 students each (see Table 3A). The largest portion of the ISI growth will be realized in Vantage College; Vantage plans to target an intake of 450 students (they actually enrolled 363 in 2016/17). Table 4A shows the Vantage program intake targets and Table 4B shows the Vantage College students' flow-through into Year 2, with some students continuing on the Okanagan campus. Table 5 provides the percentage of enrolled students in each undergraduate program that are, or are projected to be, ISI students.

The numbers reported herein have been reviewed carefully by personnel of the Deans' Offices, the Provost's Office, PAIR, and Enrolment Services. Individual faculties may redistribute their intake targets through Years 1-3 once additional application information and the corresponding yield rates are available, later this spring.



## Normal Load FTE by Fiscal Year

Table 1: UBCV Domestic Normal Load FTE

	Actual		2017/18	2018/19	Projected			
	2015/16	2016/17			2019/20	2020/21	2021/22	2022/23
<b>Government Target</b> (UBCV Undergraduates and Residents)	29,549	29,654	29,654	29,654	29,654	29,654	29,654	29,654
<b>UBCV Normal Load FTE</b>								
Undergraduates	29,654	29,437	29,791	29,592	29,481	29,375	29,330	29,318
Residents	1,402	1,461	1,461	1,461	1,461	1,461	1,461	1,461
<b>Grand Total</b>	<b>31,056</b>	<b>30,898</b>	<b>31,252</b>	<b>31,053</b>	<b>30,942</b>	<b>30,836</b>	<b>30,791</b>	<b>30,779</b>
<b>Unfunded</b>	<b>1,507</b>	<b>1,244</b>	<b>1,598</b>	<b>1,399</b>	<b>1,288</b>	<b>1,182</b>	<b>1,137</b>	<b>1,125</b>

Table 2A: UBCV Domestic Normal Load FTE by Faculty

		Actual		2017/18	2018/19	Projected			
		2015/16	2016/17			2019/20	2020/21	2021/22	2022/23
Undergraduate	Applied Science	3,977	3,805	3,877	3,774	3,711	3,678	3,663	3,657
Undergraduate	Arts	8,406	8,391	8,381	8,358	8,328	8,296	8,278	8,272
Undergraduate	Dentistry	326	328	318	319	325	319	319	319
Undergraduate	Education	2,335	2,536	2,525	2,514	2,507	2,499	2,496	2,494
Undergraduate	Forestry	585	573	633	620	620	623	625	626
Undergraduate	Land & Food Systems	1,067	1,065	1,095	1,149	1,199	1,232	1,252	1,265
Undergraduate	Law	536	543	539	548	551	551	551	551
Undergraduate	Medicine	1,259	1,250	1,253	1,258	1,255	1,252	1,252	1,252
Undergraduate	Pharmaceutical Sciences	889	873	871	866	879	879	879	879
Undergraduate	Sauder	2,733	2,711	2,733	2,727	2,728	2,724	2,722	2,721
Undergraduate	Science	6,515	6,356	6,560	6,454	6,373	6,316	6,287	6,274
Undergraduate	<b>Total</b>	<b>28,628</b>	<b>28,431</b>	<b>28,784</b>	<b>28,585</b>	<b>28,475</b>	<b>28,369</b>	<b>28,324</b>	<b>28,311</b>
Residency	Dentistry	8	3	3	3	3	3	3	3
Residency	Medicine	1,358	1,418	1,418	1,418	1,418	1,418	1,418	1,418
Residency	Pharmaceutical Sciences	36	40	40	40	40	40	40	40
Residency	<b>Total</b>	<b>1,402</b>	<b>1,461</b>	<b>1,461</b>	<b>1,461</b>	<b>1,461</b>	<b>1,461</b>	<b>1,461</b>	<b>1,461</b>
No Faculty	Non-Degree	1,026	1,006	1,006	1,006	1,006	1,006	1,006	1,006
<b>Grand Total</b>	<b>Total</b>	<b>31,056</b>	<b>30,898</b>	<b>31,252</b>	<b>31,053</b>	<b>30,942</b>	<b>30,836</b>	<b>30,791</b>	<b>30,779</b>

Table 2B: UBCV ISI Normal Load FTE by Faculty

		Actual		2017/18	2018/19	Projected			
		2015/16	2016/17			2019/20	2020/21	2021/22	2022/23
Undergraduate	Applied Science	944	1,002	1,140	1,292	1,448	1,566	1,634	1,670
Undergraduate	Arts	2,725	3,177	3,402	3,508	3,535	3,552	3,558	3,561
Undergraduate	Sauder	1,317	1,394	1,392	1,377	1,361	1,346	1,341	1,339
Undergraduate	Dentistry	4	3	3	3	3	3	3	3
Undergraduate	Education	88	103	103	100	95	90	87	87
Undergraduate	Forestry	266	311	404	415	419	425	429	431
Undergraduate	Land & Food Systems	274	316	358	394	439	479	506	523
Undergraduate	Law	10	11	11	11	11	11	11	11
Undergraduate	Medicine	1	1	1	1	1	1	1	1
Undergraduate	Science	1,018	1,234	1,391	1,460	1,492	1,515	1,532	1,539
Undergraduate	Vantage	245	348	410	455	502	502	502	502
Undergraduate	<b>Total</b>	<b>6,891</b>	<b>7,899</b>	<b>8,614</b>	<b>9,016</b>	<b>9,305</b>	<b>9,488</b>	<b>9,605</b>	<b>9,667</b>
No Faculty	Non-Degree	151	142	142	142	142	142	142	142
<b>Grand Total</b>	<b>Total</b>	<b>7,042</b>	<b>8,041</b>	<b>8,757</b>	<b>9,158</b>	<b>9,447</b>	<b>9,631</b>	<b>9,747</b>	<b>9,810</b>

**Table 3A: UBCV Undergraduate Intake Targets by Faculty**

Note that, where appropriate, Vantage flow-through is included in destination program intakes. Distinct Vantage targets and projected flow-through is also presented in Table 4.

Faculty		Domestic					ISI					Total				
		Target	Actual	Proposed Targets			Target	Actual	Proposed Targets			Target	Actual	Proposed Targets		
		2016	2016	2017	2018	2019	2016	2016	2017	2018	2019	2016	2016	2017	2018	2019
Undergraduate	Applied Science	875	913	875	875	875	335	279	368	431	476	1,210	1,192	1,243	1,306	1,351
Undergraduate	Arts	2,670	2,705	2,719	2,719	2,719	1,155	1,265	1,204	1,281	1,211	3,825	3,970	3,923	4,000	3,930
Undergraduate	Dentistry	40	35	40	40	40						40	35	40	40	40
Undergraduate	Education	303	328	303	303	303	20	33	20	20	20	323	361	323	323	323
Undergraduate	Forestry	217	209	215	219	223	102	172	145	148	151	319	381	360	367	374
Undergraduate	Land & Food Systems	381	411	393	407	421	118	140	141	159	172	499	551	534	566	593
Undergraduate	Sauder	572	590	572	572	572	380	387	380	380	380	952	977	952	952	952
Undergraduate	Science	1,770	1,794	1,710	1,710	1,710	415	467	431	446	466	2,185	2,261	2,141	2,156	2,176
Undergraduate	Vantage						300	363	450	500	550	300	363	450	500	550
Undergraduate	Total	6,828	6,985	6,827	6,845	6,863	2,825	3,106	3,139	3,365	3,426	9,653	10,091	9,966	10,210	10,289
No Faculty	Non-Degree	2,163	1,728	1,728	1,728	1,728	293	223	223	223	223	2,456	1,951	1,951	1,951	1,951
Grand Total	Total	8,991	8,713	8,555	8,573	8,591	3,118	3,329	3,362	3,588	3,649	12,109	12,042	11,917	12,161	12,240

**Table 3B: UBCV Intake Targets for Undergraduate Programs**

Note that, where appropriate, Vantage flow-through is included in destination program intakes. Distinct Vantage targets and projected flow-through is also presented in Table 4.

Faculty		Degree	Year Level	Domestic					ISI					Total				
				Target	Actual	Proposed Targets			Target	Actual	Proposed Targets			Target	Actual	Proposed Targets		
						2016	2016	2017			2018	2019	2016			2016	2017	2018
Undergraduate	Applied Science	BASC	1	546	562	546	546	546	256	221	246	256	274	802	783	792	802	820
Undergraduate	Applied Science	BASC	2	140	162	140	140	140	73	44	114	167	194	213	206	254	307	334
Undergraduate	Applied Science	BASC	3	50	48	50	50	50	0	5				50	53	50	50	50
Undergraduate	Applied Science	BASC	Total	736	772	736	736	736	329	270	360	423	468	1,065	1,042	1,096	1,159	1,204
Undergraduate	Applied Science	BEND	3	22	22	22	22	22	6	8	8	8	8	28	30	30	30	30
Undergraduate	Applied Science	BEND	Total	22	22	22	22	22	6	8	8	8	8	28	30	30	30	30
Undergraduate	Applied Science	BSN	3	117	119	117	117	117	0	1				117	120	117	117	117
Undergraduate	Applied Science	BSN	Total	117	119	117	117	117	0	1				117	120	117	117	117
Undergraduate	Applied Science	Total	Total	875	913	875	875	875	335	279	368	431	476	1,210	1,192	1,243	1,306	1,351
Undergraduate	Arts	BA	1	1,590	1,683	1,590	1,590	1,590	685	677	685	685	685	2,275	2,360	2,275	2,275	2,275
Undergraduate	Arts	BA	2	420	423	420	420	420	274	345	289	296	296	694	768	709	716	716
Undergraduate	Arts	BA	3	400	347	400	400	400	108	110	108	108	108	508	457	508	508	508
Undergraduate	Arts	BA	4	0	2									0	2	0	0	0
Undergraduate	Arts	BA	Total	2,410	2,455	2,410	2,410	2,410	1,067	1,132	1,082	1,089	1,089	3,477	3,587	3,492	3,499	3,499
Undergraduate	Arts	BFA	1			42	42	42			16	16	16	0	0	58	58	58
Undergraduate	Arts	BFA	2	15	30	49	49	49	3	15	20	20	20	18	45	69	69	69
Undergraduate	Arts	BFA	3	39	32	20	20	20	10	11	7	77	7	49	43	27	97	27
Undergraduate	Arts	BFA	4	0	4	4	4	4	0	1	1	1	1	0	5	5	5	5
Undergraduate	Arts	BFA	Total	54	66	115	115	115	13	27	44	114	44	67	93	159	229	159
Undergraduate	Arts	BIE	1	42	43	47	47	47	43	53	48	48	48	85	96	95	95	95
Undergraduate	Arts	BIE	2	0	9				0	18				0	27	0	0	0
Undergraduate	Arts	BIE	3	0	3				0	1				0	4	0	0	0
Undergraduate	Arts	BIE	Total	42	55	47	47	47	43	72	48	48	48	85	127	95	95	95
Undergraduate	Arts	BMS	1	20	24	20	20	20	20	23	20	20	20	40	47	40	40	40
Undergraduate	Arts	BMS	2	0	4				0	2				0	6	0	0	0
Undergraduate	Arts	BMS	Total	20	28	20	20	20	20	25	20	20	20	40	53	40	40	40
Undergraduate	Arts	BMUS	1	56	42	55	55	55	12	6	10	10	10	68	48	65	65	65
Undergraduate	Arts	BMUS	2	8	4	7	7	7	0	3				8	7	7	7	7
Undergraduate	Arts	BMUS	3	10	10	10	10	10						10	10	10	10	10
Undergraduate	Arts	BMUS	Total	74	56	72	72	72	12	9	10	10	10	86	65	82	82	82
Undergraduate	Arts	BSW	3	70	45	55	55	55						70	45	55	55	55
Undergraduate	Arts	BSW	Total	70	45	55	55	55						70	45	55	55	55
Undergraduate	Arts	Total	Total	2,670	2,705	2,719	2,719	2,719	1,155	1,265	1,204	1,281	1,211	3,825	3,970	3,923	4,000	3,930
Undergraduate	Dentistry	BDSC	1	30	23	30	30	30						30	23	30	30	30
Undergraduate	Dentistry	BDSC	4	10	12	10	10	10						10	12	10	10	10
Undergraduate	Dentistry	BDSC	Total	40	35	40	40	40						40	35	40	40	40
Undergraduate	Dentistry	Total	Total	40	35	40	40	40						40	35	40	40	40



**Table 3B: UBCV Intake Targets for Undergraduate Programs**

Note that, where appropriate, Vantage flow-through is included in destination program intakes. Distinct Vantage targets and projected flow-through is also presented in Table 4.

Faculty	Degree	Year Level	Domestic					ISI					Total				
			Target 2016	Actual 2016	Proposed 2017	Proposed 2018	Proposed 2019	Target 2016	Actual 2016	Proposed 2017	Proposed 2018	Proposed 2019	Target 2016	Actual 2016	Proposed 2017	Proposed 2018	Proposed 2019
Undergraduate Education	BKIN	1	190	206	190	190	190	20	33	20	20	20	210	239	210	210	210
Undergraduate Education	BKIN	2	20	28	20	20	20						20	28	20	20	20
Undergraduate Education	BKIN	3	93	94	93	93	93						93	94	93	93	93
Undergraduate Education	BKIN	Total	303	328	303	303	303	20	33	20	20	20	323	361	323	323	323
Undergraduate Education	Total	Total	303	328	303	303	303	20	33	20	20	20	323	361	323	323	323
Undergraduate Forestry	BSCN	1	75	50	60	60	60	27	31	30	30	30	102	81	90	90	90
Undergraduate Forestry	BSCN	2	0	2				0	12	10	10	10	0	14	10	10	10
Undergraduate Forestry	BSCN	3			2	2	2	0	1				0	1	2	2	2
Undergraduate Forestry	BSCN	Total	75	52	62	62	62	27	44	40	40	40	102	96	102	102	102
Undergraduate Forestry	BSCW	1	20	16	20	20	20	6	12	10	10	10	26	28	30	30	30
Undergraduate Forestry	BSCW	2	0	1				20	23	20	20	20	20	24	20	20	20
Undergraduate Forestry	BSCW	3						0	2				0	2	0	0	0
Undergraduate Forestry	BSCW	Total	20	17	20	20	20	26	37	30	30	30	46	54	50	50	50
Undergraduate Forestry	BSF	1	50	69	60	60	60	15	18	15	15	15	65	87	75	75	75
Undergraduate Forestry	BSF	2	0	1				0	14	10	10	10	0	15	10	10	10
Undergraduate Forestry	BSF	3	5	2	5	5	5	2	0				7	2	5	5	5
Undergraduate Forestry	BSF	Total	55	72	65	65	65	17	32	25	25	25	72	104	90	90	90
Undergraduate Forestry	BSFS	1	35	28	30	30	30	13	10	15	15	15	48	38	45	45	45
Undergraduate Forestry	BSFS	2						0	22	5	5	5	0	22	5	5	5
Undergraduate Forestry	BSFS	Total	35	28	30	30	30	13	32	20	20	20	48	60	50	50	50
Undergraduate Forestry	BUF	1	30	30	35	39	43	10	18	20	22	24	40	48	55	61	67
Undergraduate Forestry	BUF	2	2	6	3	3	3	9	8	10	11	12	11	14	13	14	15
Undergraduate Forestry	BUF	3	0	4				0	1				0	5	0	0	0
Undergraduate Forestry	BUF	Total	32	40	38	42	46	19	27	30	33	36	51	67	68	75	82
Undergraduate Forestry	Total	Total	217	209	215	219	223	102	172	145	148	151	319	381	360	367	374
Undergraduate Land & Food Systems	BSAB	1	82	119	88	98	108	24	28	28	31	34	106	147	116	129	142
Undergraduate Land & Food Systems	BSAB	2	35	27	35	35	35	4	5	5	5	6	39	32	40	40	41
Undergraduate Land & Food Systems	BSAB	3	10	3	10	10	10	1	0	1	1	1	11	3	11	11	11
Undergraduate Land & Food Systems	BSAB	Total	127	149	133	143	153	29	33	34	37	41	156	182	167	180	194
Undergraduate Land & Food Systems	BSFN	1	157	162	161	163	165	63	73	79	93	100	220	235	240	256	265
Undergraduate Land & Food Systems	BSFN	2	45	67	45	45	45	11	16	12	13	14	56	83	57	58	59
Undergraduate Land & Food Systems	BSFN	3	15	10	15	15	15	1	0	1	1	1	16	10	16	16	16
Undergraduate Land & Food Systems	BSFN	Total	217	239	221	223	225	75	89	92	107	115	292	328	313	330	340
Undergraduate Land & Food Systems	BSGR	2	31	12	33	35	37	13	13	14	14	15	44	25	47	49	52
Undergraduate Land & Food Systems	BSGR	3	6	11	6	6	6	1	5	1	1	1	7	16	7	7	7
Undergraduate Land & Food Systems	BSGR	Total	37	23	39	41	43	14	18	15	15	16	51	41	54	56	59
Undergraduate Land & Food Systems	Total	Total	381	411	393	407	421	118	140	141	159	172	499	551	534	566	593

'Residents' includes all those in Medical, Dental, Pharmaceutical, and Psychiatric residencies.

'Non-degree' includes all students who are Unclassified, Visiting, Exchange, or in Access Studies.

**Table 3B: UBCV Intake Targets for Undergraduate Programs**

Note that, where appropriate, Vantage flow-through is included in destination program intakes. Distinct Vantage targets and projected flow-through is also presented in Table 4.

Faculty	Degree	Year Level	Domestic					ISI					Total				
			Target 2016	Actual 2016	Proposed 2017	Targets 2018	2019	Target 2016	Actual 2016	Proposed 2017	Targets 2018	2019	Target 2016	Actual 2016	Proposed 2017	Targets 2018	2019
Undergraduate Sauder	BCOM	1	400	410	400	400	400	267	282	267	267	267	667	692	667	667	667
Undergraduate Sauder	BCOM	2	120	133	120	120	120	80	78	80	80	80	200	211	200	200	200
Undergraduate Sauder	BCOM	3	52	47	52	52	52	33	27	33	33	33	85	74	85	85	85
Undergraduate Sauder	BCOM	Total	572	590	572	572	572	380	387	380	380	380	952	977	952	952	952
Undergraduate Sauder	Total	Total	572	590	572	572	572	380	387	380	380	380	952	977	952	952	952
Undergraduate Science	BCS	3	90	85	90	90	90	15	7	5	5	5	105	92	95	95	95
Undergraduate Science	BCS	4	0	1									0	1	0	0	0
Undergraduate Science	BCS	Total	90	86	90	90	90	15	7	5	5	5	105	93	95	95	95
Undergraduate Science	BSC	1	1,400	1,418	1,350	1,350	1,350	275	283	280	280	280	1,675	1,701	1,630	1,630	1,630
Undergraduate Science	BSC	2	250	261	250	250	250	120	166	141	156	176	370	427	391	406	426
Undergraduate Science	BSC	3	30	29	20	20	20	5	11	5	5	5	35	40	25	25	25
Undergraduate Science	BSC	Total	1,680	1,708	1,620	1,620	1,620	400	460	426	441	461	2,080	2,168	2,046	2,061	2,081
Undergraduate Science	Total	Total	1,770	1,794	1,710	1,710	1,710	415	467	431	446	466	2,185	2,261	2,141	2,156	2,176
Undergraduate Vantage	VC-BA	1						125	141	150	150	175	125	141	150	150	175
Undergraduate Vantage	VC-BAS	1						65	86	125	150	150	65	86	125	150	150
Undergraduate Vantage	VC-BMG	1						25	31	50	50	75	25	31	50	50	75
Undergraduate Vantage	VC-BSC	1						85	105	125	150	150	85	105	125	150	150
Undergraduate Vantage	Total	Total						300	363	450	500	550	300	363	450	500	550
Undergraduate Total	Total	Total	6,828	6,985	6,827	6,845	6,863	2,825	3,106	3,139	3,365	3,426	9,653	10,091	9,966	10,210	10,289
No Faculty Non-Degree	ACES		190	46	46	46	46	41	17	17	17	17	231	63	63	63	63
No Faculty Non-Degree	EXCH		973	1,003	1,003	1,003	1,003						973	1,003	1,003	1,003	1,003
No Faculty Non-Degree	UNCL		674	532	532	532	532	56	33	33	33	33	730	565	565	565	565
No Faculty Non-Degree	VISI		326	147	147	147	147	196	173	173	173	173	522	320	320	320	320
No Faculty Total	Total	Total	2,163	1,728	1,728	1,728	1,728	293	223	223	223	223	2,456	1,951	1,951	1,951	1,951
Grand Total	Total	Total	8,991	8,713	8,555	8,573	8,591	3,118	3,329	3,362	3,588	3,649	12,109	12,042	11,917	12,161	12,240

**Table 4A: Vantage College Intake Targets**

Faculty	Vantage Stream	Actuals		Targets				
		2015	2016	2017	2018	2019	2020	2021
Vantage	VC-BA	128	141	150	150	175	175	175
Vantage	VC-BAS	37	86	125	150	150	150	150
Vantage	VC-BMG	18	31	50	50	75	75	75
Vantage	VC-BSC	83	105	125	150	150	150	150
<b>Grand Total</b>	<b>Total</b>	<b>266</b>	<b>363</b>	<b>450</b>	<b>500</b>	<b>550</b>	<b>550</b>	<b>550</b>

**Table 4B: Vantage College Headcount Flow-through to Year 2**

Destination Campus	Destination Faculty	Actuals		Targets				
		2015	2016	2017	2018	2019	2020	2021
UBC Okanagan	Applied Science	0	12	33	48	58	58	58
	Management	0	9	19	31	31	31	31
	<b>Total</b>	<b>0</b>	<b>21</b>	<b>52</b>	<b>79</b>	<b>89</b>	<b>89</b>	<b>89</b>
UBC Vancouver	Applied Science	1	14	33	48	58	58	58
	Arts	57	102	109	115	115	115	115
	Science	62	70	81	96	116	116	116
	Sauder	0	1	5	7	7	7	7
	Other Faculties	1	3	0	0	0	0	0
	<b>Total</b>	<b>121</b>	<b>190</b>	<b>228</b>	<b>266</b>	<b>296</b>	<b>296</b>	<b>296</b>
<b>Grand Total</b>		<b>121</b>	<b>211</b>	<b>280</b>	<b>345</b>	<b>385</b>	<b>385</b>	<b>385</b>

'Residents' includes all those in Medical, Dental, Pharmaceutical, and Psychiatric residencies.

'Non-degree' includes all students who are Unclassified, Visiting, Exchange, or in Access Studies.

**Table 5: ISI Headcount Enrolment as a Percent of Unit Enrolment**

(UBCV Direct-Entry Undergraduate Programs only)

Faculty	Program	Measure	Actual				Projected			
			2015	2016	2017	2018	2019	2020	2021	2022
Applied Science	BASC	% of BASC	22%	23%	26%	29%	31%	33%	35%	35%
		% of Applied Science	21%	22%	24%	27%	30%	32%	33%	33%
Arts	BA	% of BA	24%	27%	28%	29%	29%	29%	30%	30%
	BIE	% of BIE	50%	51%	50%	50%	49%	48%	47%	47%
	BMS	% of BMS	29%	34%	38%	42%	45%	46%	46%	46%
	BMUS	% of BMUS	8%	9%	10%	11%	11%	11%	11%	11%
	% of Arts	24%	27%	28%	29%	29%	29%	29%	29%	29%
Sauder	BCOM	% of BCOM	36%	39%	39%	39%	38%	38%	38%	38%
		% of Sauder	27%	28%	28%	28%	28%	28%	28%	28%
Dentistry	BDSC	% of BDSC	3%	2%	2%	2%	2%	2%	2%	2%
		% of Dentistry	1%	1%	1%	1%	1%	1%	1%	1%
Education	BKIN	% of BKIN	7%	8%	8%	8%	7%	7%	7%	7%
		% of Education	4%	5%	5%	4%	4%	4%	4%	4%
Forestry	BSCN	% of BSCN	30%	34%	38%	39%	39%	39%	39%	39%
	BSCW	% of BSCW	44%	48%	52%	54%	55%	55%	56%	56%
	BSF	% of BSF	26%	28%	30%	30%	29%	29%	29%	29%
	BSFS	% of BSFS	23%	37%	41%	43%	42%	42%	41%	41%
	BUF	% of BUF	41%	37%	42%	41%	42%	42%	43%	43%
	% of Forestry	31%	35%	39%	40%	40%	40%	40%	40%	40%
Land & Food Systems	BSAB	% of BSAB	13%	14%	15%	17%	17%	18%	18%	18%
	BSFN	% of BSFN	22%	24%	26%	28%	29%	31%	32%	33%
	% of Land & Food Systems	19%	22%	23%	24%	26%	27%	28%	28%	28%
Science	BSC	% of BSC	14%	17%	19%	20%	20%	21%	21%	21%
		% of Science	14%	16%	18%	19%	20%	20%	20%	21%
UBCV		% of UBCV	22%	24%	26%	27%	28%	28%	29%	29%

'Residents' includes all those in Medical, Dental, Pharmaceutical, and Psychiatric residencies.

'Non-degree' includes all students who are Unclassified, Visiting, Exchange, or in Access Studies.

3 February 2017

From: Senate Awards Committee

To: Senate

Re: Tuum Est Experiential Award Program

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The Senate Awards Committee recommends:

*“That Senate approve the Tuum Est Experiential Award Program as presented in the description below.”*

**Proposed Award Description:**

**UBC TUUM EST Experiential Award** –One-time entrance awards valued up to \$3,500 are available for outstanding domestic students entering the university directly from secondary schools (or CEGEP in Quebec) to support their participation in experiential learning opportunities. Eligible students must demonstrate excellent academic ability, a strong UBC applicant personal profile, and a high level of engagement in the community and extracurricular activities. In addition to these criteria, faculties may specify additional demographic criteria to encourage applications from specific groups (e.g., Aboriginal student, students from smaller towns and communities in British Columbia). The award is adjudicated through the admissions process and awarded upon entry to UBC; however, funds are released in-course upon confirmation of participation and/or registration in an approved experiential learning activity at UBC including co-operative education, international exchange, international service learning, undergraduate research, and other experiential learning activities as approved by the student’s Faculty. Recipients are identified by Enrolment Services in conjunction with the entering student’s Faculty. (First Award Available in the 2017/2018 Winter Session)

**Background and Rationale:**

The *Tuum Est Experiential Award* is a pilot award program being proposed by Enrolment Services in 2017. The award program has been developed in consultation with Faculties and the Provost’s offices on both the Okanagan and Vancouver campuses. In its initial year the award program will be initiated on the Vancouver Campus and implementation on the Okanagan Campus is being considered for 2018W. The award will be offered to top domestic students entering direct-entry undergraduate programs and will contain two components: 1) a guarantee of access (subject to achievement of minimum criteria for participation) or support to participate in



outstanding experiential learning activities such as international exchange, co-operative education, international service learning, and undergraduate research; and, 2) a one-time financial award of \$3,000 to support undertaking the activity. In subsequent years, additional supports (both programming and financial) and opportunities will be provided to students in their first two years of study at UBC (bringing the total value of the award to a maximum of \$3,500).

It is estimated that approximately 200 such awards could be made available to incoming students on the Vancouver campus in 2017W (a source of funding has yet to be identified on the Okanagan campus). The *UBC Tuum Est Experiential Award* will be adjudicated collaboratively between the receiving Faculties and Enrolment Services at the point of admission. Disbursement of the funding will be administered by the student's Enrolment Services Professional (Vancouver) once participation in an approved experiential learning activity is confirmed.

The award is strategically designed to highlight UBC's strengths in areas that research tells us are the most significant variables in how top students choose a post-secondary institution. The purpose of the proposed award program is to attract top domestic direct-entry students to UBC by a) underscoring the richness of the UBC learning experience and b) removing uncertainty among admitted students as to whether such opportunities will be available. In doing so, the pilot should have a positive impact in yielding a higher proportion of top direct-entry domestic students to UBC.

Through the *UBC Tuum Est Experiential Award* program, award recipients will be offered guaranteed access to and/or support for experiential learning opportunities at UBC of both a curricular and co-curricular nature. These include international exchanges (Go Global), work experiences (co-operative education), international service learning opportunities, and undergraduate research experiences. Recipients will be informed at point of admission that to receive the guarantee (for all but undergraduate research), they must maintain a minimum academic standing that renders them eligible for participation in the experiential opportunity. Award recipients will notify their ESP that they wish to apply for one of the aforementioned programs, who will in turn highlight for the program's administrative unit that the student should be prioritized for admission. Access to undergraduate research is not guaranteed, but supports will be put in place to help students discover such opportunities on campus.

It is important to note that what is being guaranteed is access to the program at UBC, not placement. An award winner's preferred placement for Go Global, a co-operative education job, and/or an international service learning opportunity are not guaranteed; only program access is guaranteed:



- a. Go Global. After successful completion of first year (min 27 credits), eligible students will be guaranteed admission to Go Global (pending confirmation of the published minimum academic requirements to enter the program).
- b. Co-operative Education. After successful completion of first year (min 27 credits), eligible students who apply to Co-operative Education will be guaranteed admission to the program (pending confirmation of the published minimum academic requirements to enter the program). Co-op offices may also impose a clause that the student must be deemed employable (e.g., good communication skills).
- c. International Service Learning. After successful completion of first year (min 27 credits), eligible students will be guaranteed admission to an International Service learning opportunity (pending confirmation of the published minimum academic requirements to enter the program). The Office of Regional and International Community Engagement may also impose a clause that they must deem the student to be suitable for international service learning (e.g., good communication skills).
- d. Undergraduate Research. An undergraduate research experience will be supported but not guaranteed. During their first three years of study, students will be offered dedicated supports to facilitate a research experience on campus.
- e. There may be other experiential learning activities that Faculties identify? for the release of these funds. For example, the Faculty of Applied Science may decide to include participation in a Design Team. The student can use these funds to “pay themselves” to participate in the team, reducing the need for a part time job. Such activities will be identified on a Faculty by Faculty basis and will be presented to the student at point of entry into UBC.

Students who participate in one of the aforementioned activities will be given a financial award of up to \$3,500. Note that the guaranteed access / supports will be provided for all of these curricular and co-curricular activities; students will not have to choose one over the other. However, the funding will only be made available once.



3 February 2017

From: Senate Awards Committee

To: Senate

Re: New Awards and Changes to Existing Awards (January 2017)

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The Senate Awards Committee recommends:

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

### **New Awards**

**N. G. CHAKRABARTI and Indra N. Chakrabarti Memorial Student Scholarship in Oncology** – Scholarships totalling \$1,300 have been made available through an endowment established by Swaraj K. and Gayatri Chattopadhyay in memory of Mrs. Chattopadhyay’s father N.G. and her brother Indra for students in the Faculty of Medicine who are specializing in Oncology. N. G. Chakrabarti (1912-1984) devoted many years of his life as an “Expert Foundry Engineer” all over the world on behalf of the United Nations Industrial Development Organization (UNIDO). Indra Chakrabarti (1947-2015) was born in Calcutta, India and made his way to Canada in 1981. Indra had many years of experience in Foundry Engineering and was an expert in ferrous metal casting. He dedicated his life to making other people happy. Preference will be given to students who have demonstrated financial need. The awards are made on the recommendation of the Faculty of Medicine and in the case of a graduate student in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2017/18 Winter Session)

**DABROWSKI and Shepherd Environmental Engineering Bursary** – Bursaries totalling \$10,000 are offered annually by Barbara Dabrowski (BASc 1978, MASc 1981) and Robert Shepherd (BASc 1969, MEng 1979) to support graduate students studying Environmental Engineering, with a specialization in Pollution Control and Waste Management. Barbara and Robert met at UBC and both dedicated their careers to Environmental Engineering. The award is adjudicated by Enrolment Services. (First Award Available in the 2017/2018 Winter Session)

**DARKVISION Technologies Engineering Co-op Achievement Award** – Five awards in the amount of \$1,000 each are offered annually by DarkVision Technologies to undergraduate students in the UBC Engineering Co-op Program in the third or fourth year of their studies. The recipients must have completed a minimum of two co-op work terms and have demonstrated high levels of achievement in their work terms. To apply for this award, students must submit a cover letter and a current resume. The award is made on the recommendation of the Faculty of



Applied Science Engineering co-op program. (First Award Available in the 2016/17 Winter Session)

**GERVIN Métis Award for Distinguished Advocacy and Leadership** – A \$1,000 award is offered annually to a student who self-identifies as Métis entering their second or third-year of the J.D. program at the Peter A. Allard School of Law. The recipient must demonstrate a connection and commitment to strengthening their Indigenous community at home, where they reside during the academic year, or within the University. Preference will be given to applicants in financial need who express an interest in criminal law, social justice, Aboriginal law or law reform. The award is made on the recommendation of the Peter A. Allard School of Law. (First Award Available in the 2016/2017 Winter Session)

**LA ROCHE-POSAY Canada Prize in Pharmaceutical Sciences** – A \$1,000 prize is offered annually by La Roche-Posay Canada to the top undergraduate student in the subject of dermatology. The award is made on the recommendation of the Faculty of Pharmaceutical Sciences. (First Award Available in the 2016/2017 Winter Session)

**Dr. John R. SCARFO Bursary** – Bursaries totalling \$3,500 have been made available through an endowment established by Dr. John R. Scarfo for students who have demonstrated financial need and are committed to a healthy lifestyle. Successful applicants will demonstrate a commitment to good health and wellbeing, such as precluding the use of tobacco and illicit drugs. Dr. Scarfo came from a family with twelve children and would not have been able to receive his MD at UBC without the generosity of Dean Walter Gage. Having been the recipient of the generosity of others, Dr. Scarfo wishes to support UBC students and honour those who had supported him. These bursaries will be adjudicated by Enrolment Services. (First Award Available in the 2017/2018 Winter Session)

**Henry SCHEIN Outstanding Leadership Award** – A \$2,500 award is offered annually by Henry Schein Canada Inc. to recognize a third year DMD student who demonstrates inspirational and engaged leadership in the areas of social responsibility and community volunteerism, as well as producing clinical work of the highest calibre. In addition to the financial component, Henry Schein Canada will sponsor the recipient to attend the Chicago Dental Society's mid-winter meeting the following spring, and will cover all associated expenses. The award is made on the recommendation of the Faculty of Dentistry. (First Award Available in the 2017/2018 Winter Session)

**Jerry WASSERMAN Scholarship in English and Theatre** – A \$1,000 scholarship is offered annually by friends, colleagues and former students in honour of Jerry Wasserman's 44 year career as a Professor of English and Theatre at UBC. The scholarship is given to an undergraduate student in the third or fourth year majoring in English, Theatre, or both, who has demonstrated academic excellence as well as promise in the performing arts (through practical activities such as acting, directing, dance, design, scriptwriting, etc.). Preference will be given to

double majors in English and Theatre. The scholarship is made on the recommendation of the Department of English in even years, and the Department of Theatre and Film in odd years. (First Award Available in the 2017/2018 Winter Session)

**Edmund T. WONG Memorial Bursary** – Four bursaries of \$175 each have been made available through an endowment established by the Estate of Edmund T. Wong for students enrolled in any faculty and in any year. Mr. Wong was a graduate of UBC (BASc 1959) and was a long-time resident of the Lower Mainland. Mr. Wong passed away in 2014. (First Award Available in the 2017/2018 Winter Session)

**Greg YEN Scholarship for Excellence in Accounting** - A \$2,000 scholarship is offered by Greg Yen, BCom 1987, and past president of the Commerce Undergraduate Society, to support a third year student specializing in accounting at the Sauder School of Business. The recipient will be selected based on top academic standing and extracurricular involvement. The award is made on the recommendation of the Sauder School of Business. (First Award Available in the 2017/2018 Winter Session)

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#### **Previously-Approved Awards with Changes in Terms or Funding Source:**

##### **#140**

**Present Award Title and Description: Roman M. Babicki Fellowship in Medical Research** – Two \$25,000 fellowships are offered by Roman M. Babicki. The awards are to support doctoral candidates in any academic department, provided that their supervisor has a primary appointment in the Faculty of Medicine. Candidates must be undertaking cancer research, ~~with preference given to~~ Canadian Citizens and Permanent Residents. Awards may be renewed for a second consecutive year, but no individual or project will receive support from this fund for more than two years. The awards are made on the recommendation of the Faculty of Medicine in consultation with the Faculty of Graduate and Postdoctoral Studies.

**Proposed Award Title and Description: Roman M. Babicki Fellowship in Medical Research** – Two \$25,000 fellowships are offered **annually** by Roman M. Babicki. The awards are to support doctoral candidates in any academic department, provided that their supervisor has a primary appointment in the Faculty of Medicine. Candidates must be undertaking cancer research **and be either** Canadian Citizens or Permanent Residents. Awards may be renewed for a second consecutive year, but no individual or project will receive support from this fund for more than two years. The awards are made on the recommendation of the Faculty of Medicine in consultation with the Faculty of Graduate and Postdoctoral Studies.

**Rationale for Changes – Type of Action:** upon donor's request, we are removing the "with preference" wording to make Canadian Citizenship or Permanent Resident status a mandatory requirement.

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**#1033****Present Award Title and Description: Jack and Mary Stone Award for Women in Business**

– A \$4,000 award ~~is offered annually~~ by Jack Stone to a female student enrolled in the Bachelor of Commerce program at the Sauder School of Business. Preference is given to a candidate specializing in marketing or finance who has demonstrated leadership in the community. Jack and his late wife Mary believed strongly in the importance of education to enable women to have successful careers. They have contributed throughout their lives to higher education and want to encourage the recipient of this award to consider this spirit of giving once they are secure in their careers. The award is made on the recommendation of the Sauder School of Business.

**Proposed Award Title and Description: Jack and Mary Stone Award for Women in Business**

– A \$4,000 award **has been made available through an endowment established** by Jack Stone **and his daughter Ann** to a female student enrolled in the Bachelor of Commerce program at the Sauder School of Business. Preference is given to a candidate specializing in marketing or finance who has demonstrated leadership in the community. Jack and his late wife Mary believed strongly in the importance of education to enable women to have successful careers. They have contributed throughout their lives to higher education and want to encourage the recipient of this award to consider this spirit of giving once they are secure in their careers. The award is made on the recommendation of the Sauder School of Business.

**Rationale for Proposed Changes – Type of Action:** we are changing the calendar description to reflect the change in award funding from annual to “endowed”; upon donors’ request, we are also adding the name of Ann Stone.

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**#1034****Present Award Title and Description: Mullen Family UBC Sauder School of Business**

**Rowing Award** – Awards totalling \$5,000 are offered annually by the Mullen Family to students enrolled at the Sauder School of Business who are also members of the Varsity Thunderbird Rowing team in any year of study. This award may be renewable provided the award winning student(s) maintain ~~athletics award standing and~~ membership on the Varsity Rowing team. The award is made on the recommendation of the Sauder School of Business in consultation with UBC Athletics.

**Proposed Award Title and Description: Mullen Family UBC Sauder School of Business**

**Rowing Award** – Awards totalling \$5,000 are offered annually by the Mullen Family to students enrolled at the Sauder School of Business who are also members of the Varsity Thunderbird Rowing team in any year of study. This award may be renewable provided the award winning

student(s) maintain membership on the Varsity Rowing team. The award is made on the recommendation of the Sauder School of Business in consultation with UBC Athletics.

**Rationale for Proposed Changes – Type of Action:** upon donor's request, and in collaboration with the Faculty Development unit, we are changing description to clarify conditions of award renewability.

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#### #1037

**Present Award Title and Description: Maili Wong Award in Finance** – A \$2,000 award is offered annually by Maili Wong for an outstanding undergraduate student enrolled in the Bachelor of Commerce degree program in the Sauder School of Business ~~with specialization in Finance~~. This award is to recognize the competitive nature and the caliber of students who apply to the Sauder Portfolio Management Foundation Program but are not admitted to the program. Preference will be given to a female student who has shown strength in the face of adversity, upholds the values of honesty and integrity, and shows commitment to both personal and professional growth. The award is made on the recommendation of the Sauder School of Business in consultation with the Sauder Portfolio Management Foundation Program.

**Proposed Award Title and Description: Maili Wong Award in Finance** – A \$2,000 award is offered annually by Maili Wong for an outstanding undergraduate student enrolled in the Bachelor of Commerce degree program in the Sauder School of Business **with preference to a student who demonstrates an interest in specializing in Finance**. This award is to recognize the competitive nature and the caliber of students who apply to the Sauder Portfolio Management Program, but are not admitted to the program. Preference will be given to a female student who has shown strength in the face of adversity, upholds the values of honesty and integrity, and shows commitment to both personal and professional growth. The award is made on the recommendation of the Sauder School of Business in consultation with the Sauder Portfolio Management Foundation Program.

**Rationale for Proposed Changes – Type of Action:** upon donor's request, and in collaboration with the Faculty Development and Awards units, we are changing the award eligibility/selection criteria to add preference language.

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#### #2005

**Present Award Title and Description: Jean Barman Prize in Aboriginal Education** – Prizes totalling \$1,000 are offered annually to students of Aboriginal ancestry pursuing graduate or teacher education degrees based on a project related to Aboriginal people. The award is named in honour of Dr. Jean Barman, an outstanding professor who taught and worked in this area. The award is made on the recommendation of the ~~Faculty of Education~~ in consultation with the

Associate Dean of Indigenous Education and in case of graduate students, the Faculty of Graduate and Postdoctoral Studies.

**Proposed Award Title and Description: Jean Barman Prize in Aboriginal Education –**

Prizes totalling \$1,000 are offered annually to students of Aboriginal ancestry pursuing graduate or teacher education degrees based on a project related to Aboriginal people. The award is named in honour of Dr. Jean Barman, an outstanding professor who taught and worked in this area. The award is made on the recommendation of the **Native Indian Teacher Education Program (NITEP)** in consultation with the Associate Dean of Indigenous Education and in case of graduate students, the Faculty of Graduate and Postdoctoral Studies.

**Rationale for Proposed Changes – Type of Action:** upon Faculty's request, in collaboration with Enrolment Services, we are changing the recommending body.

**#2507**

**Present Award Title and Description: Mary Graham Holland Scholarship in Family and Nutritional Science** – ~~A scholarship of \$700, endowed from~~ a bequest made by the late Mrs. Mary Graham Holland, is awarded to a ~~woman~~ student ~~who is entering the fourth or fifth year of study in the Human Ecology major of the B.Sc. (FNH) program. This scholarship is given on the recommendation of the Faculty of Land and Food Systems Awards Committee.~~

**Proposed Award Title and Description: Mary Graham Holland Scholarship for Home Economics** – **A \$700 scholarship has been made available through an endowment established with** a bequest made by the late Mrs. Mary Graham Holland. The scholarship is awarded to a **female** student **entering the Bachelor of Education, Secondary Option in Home Economics. The award is made on the recommendation of the Faculty of Education.**

**Rationale for Proposed Changes – Type of Action:** Human Ecology is no longer offered in the Faculty of Land and Food Systems. Upon request from Enrolment Services, and in collaboration with the Office of the University Counsel and the Faculty of Education, we are changing back the award title to the original one, and we are also changing eligibility criteria in compliance with the original terms of the endowment fund.

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**#4012**

**Present Award Title and Description: Frank Read Thunderbird Rowing Award** – One or more awards ~~totalling~~ \$1,000 have been made available through an endowment established for rowing athletes in memory of Frank Read, a beloved UBC and Olympic rowing coach. The awards celebrate Read's tireless work in proving that excellence in sport was a realistic objective for Canadians. The awards are offered to outstanding members of the Thunderbird Rowing Team who have maintained good academic standing. The award is made on the recommendation of the Rowing coaches.

**Proposed Award Title and Description: Frank Read Thunderbird Rowing Award** – One or more awards, **ranging up to a maximum amount of \$1,000 each**, have been made available through an endowment established for rowing athletes in memory of Frank Read, a beloved UBC and Olympic rowing coach. The awards celebrate Read's tireless work in proving that excellence in sport was a realistic objective for Canadians. The awards are offered to outstanding members of the Thunderbird Rowing Team who have maintained good academic standing. The award is made on the recommendation of the Rowing coaches.

**Rationale for Proposed Changes – Type of Action:** upon donor's request, and in collaboration with the Faculty Development unit, we are changing the award monetary value available.

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#### #4013

**Present Award Title and Description: Sauder School of Business UBC Rugby Award** – Awards totalling \$5,000 are offered annually to undergraduate students enrolled at the Sauder School of Business in any year of study who are also members of the Men's or Women's Varsity Thunderbird Rugby teams, with the total award value to be assigned equally between the Men's and Women's teams. This award may be renewable provided the award recipient(s) maintain ~~award standing and~~ membership on the Varsity Rugby team. If there is no Sauder School of Business student on one of the teams in any given year, the full award value will be made available to the other team. The award is made on the recommendation of the Sauder School of Business in consultation with UBC Athletics.

**Proposed Award Title and Description: Sauder School of Business UBC Rugby Award** – Awards totalling \$5,000 are offered annually to undergraduate students enrolled at the Sauder School of Business in any year of study who are also members of the Men's or Women's Varsity Thunderbird Rugby teams, with the total award value to be assigned equally between the Men's and Women's teams. This award may be renewable provided the award recipient(s) maintain and membership on the Varsity Rugby team. If there is no Sauder School of Business student on one of the teams in any given year, the full award value will be made available to the other team. The award is made on the recommendation of the Sauder School of Business in consultation with UBC Athletics.

**Rationale for Proposed Changes – Type of Action:** upon donor's request, and in collaboration with the Faculty Development unit, we are changing description to clarify conditions of award renewability.

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#### #4014

**Present Award Title and Description: Sauder School of Business UBC Soccer Award** – Awards totalling \$5,000 are offered annually to undergraduate students enrolled at the Sauder

School of Business in any year of study who are also members of the Men's or Women's Varsity Thunderbird Soccer teams, with the total award value to be assigned equally between the Men's and Women's teams. This award may be renewable provided the award winning student(s) maintain ~~award-standing-and~~ membership on the Varsity Soccer team. If there is no Sauder School of Business student on one of the teams in any given year, the full award value will be made available to the other team. The award is made on the recommendation of the Sauder School of Business in consultation with UBC Athletics.

**Proposed Award Title and Description: Sauder School of Business UBC Soccer Award –**

Awards totalling \$5,000 are offered annually to undergraduate students enrolled at the Sauder School of Business in any year of study who are also members of the Men's or Women's Varsity Thunderbird Soccer teams, with the total award value to be assigned equally between the Men's and Women's teams. This award may be renewable provided the award winning student(s) maintain membership on the Varsity Soccer team. If there is no Sauder School of Business student on one of the teams in any given year, the full award value will be made available to the other team. The award is made on the recommendation of the Sauder School of Business in consultation with UBC Athletics.

**Rationale for Proposed Changes – Type of Action:** upon donor's request, and in collaboration with the Faculty Development unit, we are changing description to clarify conditions of award renewability.

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**#5015**

**Present Award Title and Description: Sauder School of Business UBC Swimming Award –**

Awards totalling \$7,000 are offered annually to students enrolled at the Sauder School of Business in any year of study who are also members of the Varsity Thunderbird Swimming team. This award may be renewable ~~for up to four years~~ provided the award-winning student(s) maintain ~~award-standing-and~~ participation in the swimming team. The award is made on the recommendation of the Sauder School of Business in consultation with UBC Swimming.

**Proposed Award Title and Description: Sauder School of Business UBC Swimming Award**

– Awards totalling \$7,000 are offered annually to students enrolled at the Sauder School of Business in any year of study who are also members of the Varsity Thunderbird Swimming team. This award may be renewable provided the award-winning student(s) maintain participation in the swimming team. The award is made on the recommendation of the Sauder School of Business in consultation with UBC Swimming.

**Rationale for Proposed Changes – Type of Action:** upon donor's request, and in collaboration with the Faculty Development unit, we are changing description to clarify conditions of award renewability.

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**#8303**

**Present Award Title and Description: Scudamore Bursary** – A \$980 bursary ~~is offered annually~~ by Owen Salisbury Scudamore, BA 1950, BA Sc 1951, in loving memory of his brother Lieutenant John Trelawny Scudamore, killed in action October 28, 1944, and of his wife Nancy Florence Scudamore (nee Harvey), BA 1950. The bursary is awarded based on financial need, with first preference given to a student in the Bachelor of Education program (Secondary or Middle Years) who is majoring in Physical Education. If, in any given year, no suitable candidate is identified in that program, the bursary will be given to an undergraduate student in engineering. Adjudication is made by Enrolment Services.

**Proposed Award Title and Description: Scudamore Bursary** – A \$980 bursary **has been made available through an endowment established** by Owen Salisbury Scudamore, BA 1950, BASc 1951, in loving memory of his brother Lieutenant John Trelawny Scudamore, killed in action October 28, 1944, and of his wife Nancy Florence Scudamore (nee Harvey), BA 1950. The bursary is awarded based on financial need, with first preference given to a student in the Bachelor of Education program (Secondary or Middle Years) who is majoring in Physical Education. If, in any given year, no suitable candidate is identified in that program, the bursary will be given to an undergraduate student in engineering. Adjudication is made by Enrolment Services.

**Rationale for Proposed Changes – Type of Action:** we are changing the calendar description to reflect the change in award funding from annual to “endowed”.

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**Rationale for Proposed Changes – Type of Action:** The following revisions are being submitted upon the donor’s request and in collaboration with the Faculty Development Team. Bull Housser & Tupper LLP has recently merged with Norton Rose Fullbright and they have requested to change the title of their named awards accordingly. No other changes are being made:

**#2601**

**Present Award Title:** ~~Bull Housser & Tupper LLP~~ Prize in Advanced Business Law

**Proposed Award Title:** **Norton Rose Fullbright** Prize in Advanced Business Law

**#2602**

**Present Award Title:** ~~Bull Housser & Tupper LLP~~ Prize in Corporations II

**Proposed Award Title:** **Norton Rose Fullbright** Prize in Corporations II

**#2603**



**Present Award Title:** ~~Bull-Housser & Tupper LLP~~ Prize in Technology Law

**Proposed Award Title:** Norton Rose Fullbright Prize in Technology Law

**#2604**

**Present Award Title:** ~~Bull-Housser & Tupper LLP~~ Prize in Torts

**Proposed Award Title:** Norton Rose Fullbright Prize in Torts

**#2826**

**Present Award Title:** ~~Bull-Housser & Tupper LLP~~ Prize in Administrative Law

**Proposed Award Title:** Norton Rose Fullbright Prize in Administrative Law

**#5852**

**Present Award Title:** ~~Bull-Housser & Tupper LLP~~ Prize in Succession

**Proposed Award Title:** Norton Rose Fullbright Prize in Succession

**#5889**

**Present Award Title:** ~~Bull-Housser~~ Entrance Award

**Proposed Award Title:** Norton Rose Fullbright Entrance Award

**#5912**

**Present Award Title:** ~~Bull-Housser~~ Prize in Labour Law

**Proposed Award Title:** Norton Rose Fullbright Prize in Labour Law



15 February 2017

To: Vancouver Senate  
From: Senate Curriculum Committee  
Re: February Curriculum Proposals (approval)

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

The following is recommended to Senate:

**Motion:** *“That the new courses, new course code creation, program deletion and revised programs and calendar entries brought forward by the faculties of Applied Science, Arts, Commerce, Forestry, Graduate and Postdoctoral Studies (Applied Science, Arts, Commerce, Education, Land and Food Systems, Medicine, Science), Land and Food Systems, and Science be approved.”*

Respectfully submitted,

Dr. Peter Marshall, Chair

Senate Curriculum Committee



## **FACULTY OF APPLIED SCIENCE**

### *New program*

Bachelor of Design in Architecture, Landscape Architecture and Urbanism

### *Revised program*

Bachelor of Science in Nursing

## **FACULTY OF ARTS**

### *New courses*

ANTH 435 (3) The Japanese Tea Ceremony: Ethnography of Performance, Practice, and Ritual; ASIA 333 (3) Contemporary South Asian Gender and Sexuality Studies; PUNJ 403 (3) Modern Punjabi Literature; CRWR 302 (3) Writing for Podcast; SPAN 498 (306) c Directed Reading; SOCI 387 (3) Druga and Society; ACAM 300 (3) Dis/Orienting Asian Canada; VISA 101 (3) BFA Studio Practice; VISA 280 (3) Contemporary Art: Ideas as Practice II; ARTH 358 (3) Chinese Art for the Afterlife; ASIA 311 (3) Tibetan Buddhism; ASIA 313 (3) Tibetan and Himalayan Culture and Society; CRWR 310 (3) Video Game Writing and Narrative; ECON 485 (3) Political Economy; FREN 346 (3) French at Work; ITAL 325 (3) Italian Translation; FNEL 483 (3) Indigenous Languages of BC: Diversity and Vitality; LING 170 (3) Introduction to How to Learn a Language; LING 270 (3) Introduction to Studies in Second Language Acquisition; PSYC 216 (3) Questioning Psychological Science in the Media

### *Revised calendar entries*

ARTS>BFA>Degree Requirements

ARTS>BFA>Credit Requirements and Regulations ARTS>BFA>Degree Program Options

ARTS>BFA>Registration

## **FACULTY OF COMMERCE**

### *New courses*

COMM 483 (6) Leadership and General Management; COMM 484 (3) Sustainability Marketing; COMM 485 (3) Social Entrepreneurship

## **FACULTY OF FORESTRY**

### *New course*

CONS 452 (12) Global Perspectives Capstone

## **FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES**

### **Applied Science**

#### *New courses*

BMEG 557 (1) Statistical Methods for Evaluating Medical Technologies; EECE 555 (3) Renewable and Efficient Electric Power Systems; MINE 521 (3) Advanced Flotation Technology

### **Arts**

#### *New program, new course, revised calendar entries*

Ph.D. in Cinema and Media Studies; ASIA 562 (3) Buddhism, Modernity, and the Nation-State in Asia; STS emphases in English, History and Philosophy; STS emphasis in Sociology

**Commerce***Program deletion*

Joint MBA/MAAPPS

**Education***New courses*

EDCP 524 (3) Technology, Virtual Worlds, and Digital Visual Culture in Art Education; EDCP 542 (3) Theorizing Pedagogy; EDCP 530 (3) Continuing Professional Education and Learning

**Land and Food Systems***New course code creation, new courses, revised calendar entry*

LWS; LWS 501 (3) Advanced Soil Processes; LWS 510 (3) Land and Water Seminar; LWS 515 (3) Integrated Watershed Management; LWS 517 (3) Land and Water Resource Evaluation; LWS 548 (6) Major Project; LWS 550 (3) Professional Communications Strategies; G+PS>Degree Programs>Soil Science>Master of Land and Water Systems>Program Requirements; FRE 522 (1.5) Environmental Externalities in the Global Economy

**Medicine***New program*

Master in Global Surgical Care

**Science***New course*

CPSC 513 (3) Introduction to Formal Verification and Analysis

**LAND AND FOOD SYSTEMS***New course*

APBI 319 Aquaculture and the Environment

**SCIENCE***New program*

Bachelor of Science (Combined Honours) in Biochemistry and Forensic Science

**BSN Programme Curricular Revision****October 27, 2016 (Edited Nov 16-16)****Table of Contents**

1. [Introduction and Executive Summary](#)
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3. Package of Course Materials and Category 1 & 2 Forms
  - a. Thread Theory Courses
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    - ii. [NURS350 Critical Inquiry & Research in Healthcare Practice](#)
    - iii. [NURS351 Leadership Policy & Informatics](#)
    - iv. [NURS352 Relational and Ethical Nursing Practice](#)
    - v. [NURS344 Critical Inquiry Leadership Synthesis](#)
    - vi. [NURS353 Promoting the Health of Indigenous People](#)
    - vii. [NURS310 Basic Principles of Pharmacology for Nursing Practice](#)
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- i. [NURS346 Theoretical Perspectives in Nursing: Infants, Children, Youth & their Families](#)
- ii. [NURS366 Nursing Practice with Infants, Children, Youth, and their Families](#)

### Mental Health

- i. [NURS303 Theoretical Perspectives in Nursing: People living with mental health challenges](#)
- ii. [NURS363 Nursing Practice with People living with mental health challenges](#)

### Primary Health Care

- i. [NURS301 Theoretical Perspectives in Nursing: Primary Healthcare](#)
- ii. [NURS362 Nursing Practice in Primary Healthcare Contexts](#)

### Integrated Experiences

- i. [NURS430 Theoretical Perspectives in Nursing: Special Topics in complex and urgent health challenges across settings/populations](#)
- ii. [NURS427 Consolidated Practice Experience](#)

## 4. [Supporting Documentation](#)

- a. Programme Outcomes
- b. Curriculum Conceptual Strands – Guiding Document
- c. BSN Transformation – Course Mapping Document – Compares Existing Courses to Proposed Courses
- d. Programme Outcomes
- e. Curriculum Mapping Document
- f. BSN Transformation Course Mapping Document – Compares courses in Existing BSN to Transformed BSN proposal
- g. Delivery Structure
- h. Consultation Log: List of workshops, faculty working groups, internal & external consultations with key stakeholders
- i. Transformation PowerPoint: working document providing overview of conceptualization & validated principles informing curricular transformation

## UBC School of Nursing BSN Program Revision

### Introduction

On October 24<sup>th</sup>, 2017, the UBC School of Nursing Faculty Caucus approved a major revision to its current BSN Programme.

The proposed programme revision that is presented in this package results from engagement with School of Nursing faculty over the preceding 20 months. The proposed changes were informed by:

- A review and analysis of the existing programme content and learning experiences including an analysis of student, faculty and clinical practice partners' feedback
- A review and analysis of regional, provincial and national professional and health policy initiatives
- Extensive consultations with clinical practice leaders and practice partners on emerging trends in practice,
- Ongoing consultation and engagement with faculty to ensure emerging research trends are incorporated into the design and delivery of content.

In undertaking the revision we have sought to retain and build upon the conceptual strengths and uniquenesses of the existing programme. As with the current programme the revised programme admits students with a minimum of 48 credits to the third year and is completed over 5 consecutive terms. The proposed revision requires 81 credits of nursing courses as compared to the current programme which is 80 credits.

This proposal for revision updates and refines a number of learning experiences to better reflect the changing healthcare landscape and clinical practice priorities. It introduces new courses and content to reflect emerging trends in research and practice. In addition to changes in content, the delivery model has been restructured to incorporate new approaches in clinical learning and to facilitate the introduction of new pedagogical trends in classroom, laboratory and simulation learning while also seeking to reduce costs. Over the next 6 months, School of Nursing faculty will be working closely with UBC resource people (CTLT) as instructional materials are developed.

**THE UNIVERSITY OF BRITISH COLUMBIA**

# UBC Curriculum Proposal Form

## Change to Course or Program

**Category: (1)**

[illegible]



### Costs Other Than Sessional Fee

There are additional expenses for uniforms, travel, and clinical practice. Students should be prepared to have clinical practice outside the Vancouver area and therefore should include travel costs for this experience in estimating total expenses. Students must have access to a car for transportation to minimize time and effort expended in travel to the varied areas used for clinical experiences. It is the student's responsibility to arrange transportation to clinical practice settings and to arrive at scheduled times. Please see [Undergraduate FAQs](#) for information on these additional costs.

### Time Period for Program Completion

Students entering the B.S.N. program must normally meet all requirements within a maximum of five years from initial enrolment. Students interrupting their program are advised that curriculum changes may necessitate a period of supplementary work to enable them to fit into the subsequent courses.

Where time normally permitted for completion of degree has elapsed, candidates will be required to provide evidence to justify special consideration.

### Degree Requirements:

#### *Degree Requirements*

### English Requirements

To qualify for the B.S.N., all students must have a minimum of 3 credits in English. Exceptionally, this English prerequisite may be waived for students who have completed a bachelor's degree from an accredited university (where English was the main language of instruction during that degree).

### Regulations and Requirements for students enrolled before 2017W

#### Third and Fourth Year Courses

	Term 1
NURS 302	6
NURS 303	8
NURS 304	2
NURS 305	1

### Costs Other Than Sessional Fee

There are additional expenses for uniforms, travel, and clinical practice. Students should be prepared to have clinical practice outside the Vancouver area and therefore should include travel costs for this experience in estimating total expenses. Students must have access to a car for transportation to minimize time and effort expended in travel to the varied areas used for clinical experiences. It is the student's responsibility to arrange transportation to clinical practice settings and to arrive at scheduled times. Please see [Undergraduate FAQs](#) for information on these additional costs.

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### Degree Requirements:

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To qualify for the B.S.N., all students must have a minimum of 3 credits in English. Exceptionally, this English prerequisite may be waived for students who have completed a bachelor's degree from an accredited university (where English was the main language of instruction during that degree).

#### Third and Fourth Year Courses

	Term 1
NURS 302	6
NURS 303	8
NURS 304	2
NURS 305	1

NURS 306	1	NURS 306	1
Total Credits	18	Total Credits	18
<b>Terms 2, 3, and 4</b>		<b>Terms 2, 3, and 4</b>	
NURS 333	6	NURS 333	6
NURS 334	6	NURS 334	6
NURS 335	6	NURS 335	6
NURS 336	6	NURS 336	6
NURS 337	12	NURS 337	12
NURS 338	2	NURS 338	2
NURS 339	2	NURS 339	2
NURS 340	2	NURS 340	2
NURS 341	2	NURS 341	2
NURS 342	1	NURS 342	1
NURS 343	2	NURS 343	2
Total Credits	47	Total Credits	47
<b>Term 5</b>		<b>Term 5</b>	
NURS 344	2	NURS 344	2
Clinical Nursing Focus	6	Clinical Nursing Focus	6
NURS 427	8	NURS 427	8
Total Credits	16	Total Credits	16
Total Credits (Years 3 and 4)	81	Total Credits (Years 3 and 4)	81
Total Program Credits	129	Total Program Credits	129
<b>Clinical Nursing Focus</b>		<b>Clinical Nursing Focus</b>	
<ul style="list-style-type: none"> <li>NURS 420 (6) Clinical Nursing Focus: Adults Experiencing Acute or Chronic Health Conditions</li> <li>NURS 422 (6) Clinical Nursing Focus: Childbearing Families</li> <li>NURS 423 (6) Clinical Nursing Focus: Children and their Families</li> <li>NURS 424 (6) Clinical Nursing Focus: Individuals and Families with Mental Health Concerns</li> <li>NURS 425 (6) Clinical Nursing Focus: Community and Population Health</li> </ul>		<ul style="list-style-type: none"> <li>NURS 420 (6) Clinical Nursing Focus: Adults Experiencing Acute or Chronic Health Conditions</li> <li>NURS 422 (6) Clinical Nursing Focus: Childbearing Families</li> <li>NURS 423 (6) Clinical Nursing Focus: Children and their Families</li> <li>NURS 424 (6) Clinical Nursing Focus: Individuals and Families with Mental Health Concerns</li> <li>NURS 425 (6) Clinical Nursing Focus: Community and Population Health</li> </ul>	
Credit is given for one of NURS 420, 422, 423, 424, or 425.		Credit is given for one of NURS 420, 422, 423, 424, or 425.	

## Advancement

The minimum passing grade in each nursing course is 60%. The minimum cumulative grade average to continue in the program is 65%.

In clinical nursing courses the student is required to have successfully completed clinical practice before being allowed to write the final course assessment.

Supplemental examinations are not offered.

Students who do not achieve the minimum grade average for promotion will normally be required to discontinue study in the School for at least one year.

Although satisfactory academic performance is a prerequisite to advancement, it is not the sole criterion in the consideration of the suitability of a student for promotion or graduation. The School reserves the right to require a student to withdraw from the School if considered to be unsuited to proceed with the study or practice of nursing.

Students who begin the BSN programme before 2017W (1) and who fall out of sequence with their cohort will transition into the new curriculum. Students will be appointed an advisor who will map out the programme requirements upon re-entry to ensure the student receives credit for courses completed, and completes courses required to achieve the programme outcomes.

The students' adapted programme requirements will be approved by the Director and documented in their record. For such students, the modified programme credit requirements will remain at 81 credits.

## Interprofessional Education

In order to graduate and to meet the College of Registered Nurses of British Columbia (CRNBC) requirements for Interprofessional Practice competencies, and as required by B.S.N. program approval from the regulatory body, students must complete the interprofessional education requirements of the program: students are required to participate in a minimum series of learning activities determined by the School of Nursing and offered through the UBC Interprofessional (IPE) Passport system. This system offers students learning experiences that include a combination of "exposure" and "immersion" learning activities that are recorded by the students and tracked online by the UBC IPE Passport system.

## Regulations and Requirements for

## Interprofessional Education

In order to graduate and to meet the College of Registered Nurses of British Columbia (CRNBC) requirements for Interprofessional Practice competencies, and as required by B.S.N. program approval from the regulatory body, students must complete the interprofessional education requirements of the program: students are required to participate in a minimum series of learning activities determined by the School of Nursing and offered through the UBC Interprofessional (IPE) Passport system. This system offers students learning experiences that include a combination of "exposure" and "immersion" learning activities that are recorded by the students and tracked online by the UBC IPE Passport system.

## Type of Action:

Major revision of course requirements and delivery structure.

## Rationale for Proposed Change:

The proposed programme revision:

- Maintains programme length (5 consecutive terms)
- Increases programme credits from 80 to 81 Assumes the same enrollment
- This programme revision incorporates a number of enhancements of theory & practice experiences to address healthcare priorities & changes in the practice environment. In addition to introducing new content it re-organizes and re-designs learning experiences.

**students enrolled 2017W onwards****Third & Fourth Year Courses**

<b>Term 1</b>	
NURS300	3
NURS330	3
NURS310	2
NURS 321	2
NURS 360	4
<b>Term total = 14</b>	
<b>Terms 2, 3, 4</b>	
NURS 352	3
NURS 353	2
NURS 331	3
NURS 354	3
NURS 322	1
NURS 351	3
NURS 303	3
NURS 344	2
NURS 301	3
NURS 323	1
NURS 365	3
NURS 363	4
NURS 350	3
NURS 362	4
NURS 345	3
NURS 346	3
NURS401	1
NURS 366	3
NURS 361	7
<b>Total terms 2,3,4 = 55</b>	
<b>Term 5</b>	
NURS 430	2
NURS 402	1
NURS 427	9
<b>Total term 5 = 12</b>	
<b>Total Credits (Years 3&amp;4)</b>	<b>81</b>
<b>Total Programme Credits</b>	<b>129</b>

**Advancement**

The minimum passing grade for nursing theory courses is 60%. The minimum cumulative grade average to continue in the program is 65%.

Clinical nursing and laboratory courses are marked on

It:

- Introduces a new course focusing on health of Indigenous populations;
- Includes new courses focused on Seniors Care;
- Increases in the nature and types of inter-professional learning experiences &
- Includes primary healthcare content & experiences.

This programme revision also restructures & reschedules the organization of learning experiences to enhance student learning. Including the:

- formation of a cohort model of student learning & progression through the programme;
- separation of theory, clinical and laboratory experiences into separate courses to enable better use of different technologies and pedagogy to enhance student learning;
- consolidation of a number of 1 & 2 credit theory courses that share a substantive focus into 3 credit courses to reduce duplication & student workload;
- extension of clinical courses which are currently condensed into 6 weeks to 13 weeks to provide more time for students to consolidate learning & receive and act on formative feedback.

a Pass/Fail basis. A clinical course must be passed in order to progress to a subsequent clinical course. A failure in a laboratory course may require withdrawal from a clinical course.

Supplemental examinations are not offered.

Students who do not achieve the minimum grade average for promotion or who fail a clinical course will normally be required to discontinue study in the School for at least one year.

Although satisfactory academic performance is a prerequisite to advancement, it is not the sole criterion in the consideration of the suitability of a student for promotion or graduation. The School reserves the right to require a student to withdraw from the School if considered to be unsuited to proceed with the study or practice of nursing.

### **Interprofessional Education**

In order to graduate and to meet the College of Registered Nurses of British Columbia (CRNBC) requirements for Interprofessional Practice competencies, and as required by B.S.N. program approval from the regulatory body, students must complete the interprofessional education requirements of the program: students are required to participate in a minimum series of learning activities determined by the School of Nursing. Some of these experiences are integrated into courses and others are offered through the UBC Interprofessional (IPE) Passport system. This system offers students learning experiences that include a combination of “exposure” and “immersion” learning activities that are recorded by the students and tracked online by the UBC IPE Passport system.



## UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 300(3) Theoretical and Professional Foundations for Nursing Practice</b>  Introduction to <b>knowledge</b> fundamental to the discipline and practice of nursing.  <i>Students who take NURS300 may not also earn credit for NURS302.</i>	<b>URL:</b> NURS302  <b>Present Calendar Entry:</b> NURS <del>302 (6) Foundations for</del> Professional Nursing Practice Introduction to fundamental <del>theories, concepts, evidence, and competencies pertaining to</del> the discipline and practice of nursing. <del>Corequisite: All of NURS 303, NURS 304, NURS 305, NURS 306.</del>  <b>Type of Action:</b> This is a major revision of <i>NURS 302 - Foundations for Professional Nursing Practice</i> .  There are changes to the course number, title, course description, credit value, calendar description, course objectives and pre-co-requisites.  <b>Rationale for Proposed Change:</b> These revisions are part of a major programme revision submitted with this proposal. A key element of the programme revision is a restructuring of courses to separate theory from laboratory and clinical experiences. The current course combines theory and laboratory learning. In the proposed revision we have refined the theory component and transferred laboratory – clinical skills learning to a separate series of new courses (proposals included in the package.)  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course and not open to students in other programmes.



## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS350 (3)</b> Critical Inquiry and Research in Health Care Practice  The significance of critical inquiry and research in nursing and health care, and the fundamental concepts and processes pertaining to scientific inquiry, evidence-based practice, and research utilization in nursing. <i>Students who take NURS 350 cannot earn credit for NURS 305, NURS 339 or NURS 342</i>  Pre-requisites: NURS300, 330, 310, 321, 360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of a broader BSN programme revision & redesign of learning experiences, this new 3 credit course combines major elements of existing courses NURS305, 339, 342. The revision is based upon student feedback that there was overlap in the content of the 3 courses and analysis of the workload for students and faculty (i.e. current courses require up to 9 assignments across the 3 courses).  <b>X      Not available for Cr/D/F grading</b> (undergraduate courses only)  <b>Rationale for not being available for Cr/D/F:</b> This is a required course and not open to students in other programmes.


**THE UNIVERSITY OF BRITISH COLUMBIA**

## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>NURS351 (3)</b> Leadership, Policy, and Informatics  The enactment of nursing leadership and policy within different health sectors and jurisdictions and the relevance and application of informatics competencies to the delivery of nursing care.  <i>Students who take NURS 351 cannot earn credit for NURS 306, NURS 340 or NURS 343</i>  Pre-requisites: NURS300, 330, 310, 321, 360.	<b>Type of Action:</b> New Course <b>Rationale for Proposed Change:</b> As part of a broader BSN programme revision & redesign of learning experiences, this new 3 credit course combines major elements of NURS306, 340, 343 which are existing courses, and introduces new content related to leadership & informatics.  <b>X      Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course and not open to students in other programmes.





## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS352 (3) Relational and Ethical Nursing Practice</b>  Relational theoretical underpinnings of nursing practice and healthcare ethics are critically examined.  <i>Students who take NURS 352 cannot earn credit for NURS 304, NURS 338 or NURS 341</i>  Pre-requisites: NURS300,330,310,321,360	<b>Type of Action:</b> New Course <b>Rationale for Proposed Change:</b> As part of a broader BSN programme revision & redesign of learning experiences, this new 3 credit course combines major theoretical elements of the above listed existing courses NURS304,338,341. Feedback from students on the existing courses identified areas of overlap & repetition.  <b>X Not available for Cr/D/F grading</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course for the BSN degree and not open to students outside of the programme.


**THE UNIVERSITY OF BRITISH COLUMBIA**

## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 344 (2)</b> Critical Inquiry and Leadership Synthesis  Evidence is examined and synthesized to understand and identify theoretical insights to address a leadership challenge in professional practice.  Prerequisites: All of NURS300,330,310,321,360,350,351,352	<b>URL:</b> NURS344  <b>Present Calendar Entry:</b> NURS 344 (2) <b>Nursing Synthesis Project</b> <del>Self directed student project to synthesize and apply knowledge in a field of nursing practice under the guidance of a faculty mentor. Pass/Fail. This course is not eligible for Credit/D/Fail grading.</del> <del>Prerequisite: All of NURS 302, NURS 303, NURS 304, NURS 305, NURS 306, NURS 338, NURS 339, NURS 340.</del> <del>Corequisite: NURS 427. And Clinical Nursing Focus.</del>  <b>Type of Action:</b> Refinement of existing course objectives, title, description & prerequisites.  <div style="text-align: center;"> <b>X      Not available for Cr/D/F grading (undergraduate courses only)</b> </div>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course for the BSN programme and not open to students in other programmes.



## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>NURS353 (2) Promoting the health of Indigenous people</b>  Foundations to contribute to supporting and providing high quality, ethical, respectful and culturally safe health care in partnership with Indigenous people in Canada and around the globe.  Pre-requisites: NURS 300	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> This core theory course introduces and consolidates concepts related to Indigenous health that were previously introduced and integrated through the previous curriculum. Concepts will be applied in clinical practice courses. In designing a specific course we seek to signal a commitment to address recommendations of the TRC.



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

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<b>Proposed Calendar Entry:</b> <b>NURS 310 (2)</b> Basic Principles of Pharmacology for Nursing Practice  Basic principles of pharmacology and the basic structure and function of each body system will be explored to demonstrate how drug interactions occur within systems.  Pre-requisites: NURS300, 330, 321, 360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> Feedback from faculty and students in the current programme recommended a dedicated course to re-introduce principles of pharmacology, rather than having content be threaded through the series of clinical/theory courses.  <b>X</b> Not available for Cr/D/F grading (undergraduate courses only)  <b>Rationale for not being available for Cr/D/F:</b> This is a required course for the BSN programme and is not open to students in other programmes.



## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 354 (3) Theoretical Perspectives in Nursing: Complexities in Seniors Care</b>  Research and clinical practice innovations in the care of Seniors and their families (e.g., philosophies of care; age-friendly initiatives) and provide strategies for improving their health through the purposeful integration of such practices in clinical settings.  Pre- requisites: NURS300,330,310,321,360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the BSN programme revision & in recognition of the shifting demographic profile of Canadians and of persons accessing care across all care contexts, this new course is intended to provide content specific to the healthcare of Seniors. In the current programme content related to Seniors was integrated. Concepts will be applied in pertinent clinical courses.  <b>X Not available for Cr/D/F grading</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course for the BSN programme and not open to students in other disciplines.

**THE UNIVERSITY OF BRITISH COLUMBIA****UBC Curriculum Proposal Form  
Change to Course or Program****Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 321 (2)</b> Foundational Skills and Competencies for Clinical Practice I  Skills and competencies for clinical practice using a variety of modalities and learning activities.  Co-requisites: NURS300,330,310,360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> In the current BSN programme clinical courses include theory, laboratory and clinical components. As part of the BSN programme revision we have separated theory, laboratory learning & clinical practice. This new course is one of a series of Foundational Skills & Competencies courses that we have designed to support student learning.  <b>X Not available for Cr/D/F grading</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines.  <b>X Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>

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Change to Course or Program****Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> NURS 322(1) Foundational Skills and Competencies for Clinical Practice II  Clinical practice through a variety of modalities and learning activities in the laboratory environment.	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> In the current BSN programme clinical courses include theory, laboratory and clinical components. As part of the BSN programme revision we have separated theory, laboratory learning & clinical practice. This new course is one of a series of Foundational Skills & Competencies courses that we have designed to support student learning.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines.  <b>X Pass/Fail or    <input type="checkbox"/> Honours/Pass/Fail grading</b>


**THE UNIVERSITY OF BRITISH COLUMBIA**

## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 323 (1)</b> Foundational Skills and Competencies for Clinical Practice III Skills and competencies for clinical practice across the lifespan and health care continuum through a variety of modalities and learning activities.  Pre-requisites: NURS300,330,310,321,360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> In the current BSN programme clinical courses include theory, laboratory and clinical components. As part of the BSN programme revision we have separated theory, laboratory learning & clinical practice. This new course is one of a series of Foundational Skills & Competencies courses that we have designed to support student learning.  <div style="margin-top: 20px;"> <b>X      Not available for Cr/D/F grading (undergraduate courses only)</b> </div> <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines.  <div style="margin-top: 20px;"> <b>X Pass/Fail or      <input type="checkbox"/> Honours/Pass/Fail grading</b> </div>





## UBC Curriculum Proposal Form Change to Course or Program

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<b>Proposed Calendar Entry:</b> <b>NURS 401 (1) Foundational Skills and Competencies for Clinical Practice IV</b>  Students are prepared with the skills and competencies for clinical practice in simulated acute and community settings through a variety of modalities and learning activities.  <b>Pre-requisites:</b> NURS300,330,321,360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> In the current BSN programme clinical courses include theory, laboratory and clinical components. As part of the proposed BSN programme revision we have separated theory, laboratory learning & clinical practice. This new course is one of a series of Foundational Skills & Competencies courses that we have designed to support student learning.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines.  <b>X Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>



## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 402 (1) Foundational Skills and Competencies for Clinical Practice - V</b>  Students are guided to consolidate skills and competencies for clinical practice through a variety of modalities and learning activities.  Pre-requisites: All of NURS300,321,322,323,353, 401,360,361,365,366,363,362  Co-requisite: NURS430	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> In the current BSN programme clinical courses include theory, laboratory and clinical components. As part of the proposed BSN programme revision we have separated theory, laboratory learning & clinical practice. This new course is the final course in a series of Foundational Skills & Competencies courses that we have designed to support student learning. It is focused on integrating knowledge and skills from all previous courses in preparation for their final practicum.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not available to students in other disciplines.  <b>X Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>



## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 330(3) Theoretical Perspectives in Nursing: Adults/Older Adults and their Families</b>  Introduction to fundamental theories, concepts, evidence, and competencies pertaining to nursing practice with adults/older adults and their families.  Co-requisites: NURS302, NURS310, NURS321, NURS, 360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the theory portions for a number of current courses as noted above.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines.



## THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form  
Change to Course or Program

## Category: (1)

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 360(4)</b> Nursing Practice with Adults/Older Adults and their Families  Clinical practice to integrate and consolidate professional nursing knowledge, skills and competencies in the care of adults/older adults with stable or expected health care challenges and their families.  <i>Students who take NURS 360 cannot earn credit for NURS 303, NURS 337 or NURS 420</i>  Co-requisites: NURS300, NURS330, NURS310, NURS321	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the clinical portions for a number of current courses (NURS303, NURS337 and NURS420)  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a core course in the BSN programme and not open to students in other disciplines  <b>X Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>

**THE UNIVERSITY OF BRITISH COLUMBIA****UBC Curriculum Proposal Form  
Change to Course or Program****Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 331(3) Theoretical Perspectives in Nursing: Adults/Older Adults Experiencing Acute Health Challenges and Their Families</b>  Consolidation of fundamental theories, concepts, evidence, and competencies pertaining to acute care nursing practice with adults/older adults and their families.  <i>Students who take NURS 331 cannot earn credit for NURS 303, NURS 337 or NURS 420</i>  Co-requisites: NURS300, NURS310, NURS321, NURS,360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the theory portions for a number of current courses (NURS 303, NURS 337 and NURS 420)  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not available to students in other disciplines.



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 361(7)</b> Nursing Practice with Adults/Older Adults Experiencing Acute Health Challenges and their families  Clinical practice to integrate and consolidate professional nursing knowledge, skills and competencies in the care of adults/ older adults experiencing acute health challenges and their families.  <i>Students who take NURS 361 cannot earn credit for NURS 303, NURS 337 or NURS 420</i>  Co-requisites: NURS300, NURS330, NURS310, NURS321, NURS360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the clinical portions for a number of current courses NURS 420, 337, and 303.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines.  <b>X Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>

**THE UNIVERSITY OF BRITISH COLUMBIA****UBC Curriculum Proposal Form  
Change to Course or Program****Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 345(3)</b> Theoretical Perspectives in Nursing: Childbearing Individuals and their Families  Analysis and application of theories, concepts, evidence and competencies guiding professional nursing practice with childbearing individuals and families during the transition to parenthood in a variety of practice settings and contexts.  <i>Students who take NURS 345 cannot earn credit for NURS 333 or NURS 422</i>	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the theory portions for a number of current courses including NURS333, 422.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not available to students in other disciplines.

**THE UNIVERSITY OF BRITISH COLUMBIA****UBC Curriculum Proposal Form  
Change to Course or Program****Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> <b>NURS 365(3) Nursing Practice with Childbearing Individuals and Families</b>  Clinical practice to integrate and consolidate professional nursing knowledge, skills and competencies in the care of childbearing individuals, infants, and their Families.  <i>Students who take NURS 365 cannot earn credit for NURS 333 or NURS 422</i>  Co-requisites: NURS302, NURS330, NURS310, NURS321, NURS360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the clinical portions for a number of current courses including NURS333, 422.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not available to students in other disciplines.  <b>X Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>





# THE UNIVERSITY OF BRITISH COLUMBIA

## UBC Curriculum Proposal Form Change to Course or Program

**Category: (1 or 2)**

<p><b>Faculty:</b> Applied Science  <b>Department:</b> Nursing  <b>Faculty Approval Date:</b> October 24, 2016  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2017</p>	<p><b>Date:</b> October 26, 2016  <b>Contact Person:</b> Dr. Judith Lynam  <b>Phone:</b> 2-7476  <b>Email:</b> Judith.lynam@nursing.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b>  <b>NURS 346(3) Theoretical Perspectives in Nursing: Infants, Children, Youth and their Families</b>          Analysis and application of theories, concepts, evidence and competencies guiding professional nursing practice with infants, children, youth and their families in a variety of practice settings and contexts.</p> <p><i>Students who take NURS 346 cannot earn credit for NURS 334 or NURS 423</i></p> <p>Pre-requisites: NURS302, NURS330, NURS310, NURS321, NURS360</p>	<p><b>Type of Action:</b>          New Course</p> <p><b>Rationale for Proposed Change:</b>          As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the theory portions for a number of current courses NURS334, 423..</p> <p><b>X Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not available to students in other disciplines.</p>



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>NURS 366(3) Nursing Practice with Infants, Children, Youth and their Families: Practicum</b>  Clinical practice to integrate and consolidate professional nursing knowledge, skills and competencies in the care of infants, children, youth and their families.  <i>Students who take NURS 366 cannot earn credit for NURS 334 or NURS 423</i>  Pre-requisites: NURS302, NURS330, NURS310, NURS321, Co-requisite NURS346	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the clinical portions for a number of current courses including NURS 334 & 423.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not available to students in other disciplines.  <b>X Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>

**THE UNIVERSITY OF BRITISH COLUMBIA****UBC Curriculum Proposal Form  
Change to Course or Program****Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b>  NURS303(3) <b>Theoretical Perspectives in Nursing: People living with Mental Health Challenges and Their Families</b>  Theory informing a life course perspective on Nursing Practice with People Living with Mental Health Challenges and their families is introduced.  <i>Students who take NURS 303 cannot earn credit for NURS 335 or NURS 424</i>	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the theory portions for a number of current courses including NURS335 & 424.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines.

**THE UNIVERSITY OF BRITISH COLUMBIA****UBC Curriculum Proposal Form  
Change to Course or Program****Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b>  NURS 363(4) <b>Nursing Practice with People Living with Mental Health Challenges and Their Families</b>  Students will apply theory and concepts from a life course perspective in the provision of nursing care to persons living with mental health challenges and their families.  <i>Students who take NURS 363 cannot earn credit for NURS 335 or NURS 424</i>  Pre-requisites: NURS300, NURS330, NURS310, NURS321, NURS360  Co-requisite NURS303	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the clinical portions for a number of current courses including NURS 335, 424.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines  <b>X Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b>  NURS301(3) Theoretical Perspectives in Nursing: Primary Health Care  Analysis and application of theories, concepts, evidence and competencies guiding professional nursing practice in the context of primary health care.  <i>Students who take NURS 342 cannot earn credit for NURS 336 or NURS 402</i>  <b>Pre-requisites:</b> NURS300, NURS330, NURS310, NURS321, NURS360	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the theory portions for a number of current courses including NURS 336, 425. It also introduces primary healthcare as a key practice focus.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines.



# THE UNIVERSITY OF BRITISH COLUMBIA

## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<p><b>Proposed Calendar Entry:</b></p> <p><b>NURS362(4) Nursing Practice in Primary Health Care Contexts</b>          Clinical practice to integrate and consolidate professional nursing knowledge, skills and competencies in the context of primary health care.</p> <p><i>Students who take NURS 362 cannot earn credit for NURS 336 or NURS 425</i></p> <p><b>Pre-requisites:</b>          NURS300, NURS330, NURS310, NURS321, NURS360</p> <p><b>Co-requisite:</b> NURS301</p>	<p><b>Type of Action:</b>          New Course</p> <p><b>Rationale for Proposed Change:</b>          As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This course includes elements of the clinical portions for a number of current courses including NURS 425 &amp; 336. It also introduces primary healthcare as a key practice focus.</p> <p><b>X Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b>Rationale for not being available for Cr/D/F:</b>          This is a required course in the BSN programme and not open to students in other disciplines.</p> <p><b>X Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading</b></p>



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>NURS 430(2) Theoretical Perspectives in Nursing: Special topics in complex and urgent health challenges across settings/populations</b>  Consolidation of fundamental theories, concepts, evidence, and competencies pertaining to nursing practice across the life-span and care context.  <i>Students who take NURS 430 cannot earn credit for NURS 420, 422, 423, 424 or 425</i>  Pre-requisites: NURS302, NURS350, NURS344, NURS 350, NURS 351, NURS 352, NURS 353, NURS 354, NURS 310, NURS 321, NURS 322, NURS 323, NURS 401, NURS 330, NURS 360, NURS 331 NURS 361, NURS 345, NURS 365, NURS 346, NURS 366, NURS 303, NURS 363, NURS 301, NURS362  Co-requisite: NURS402	<b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> As part of the proposed BSN programme revision, we have created separate theory, laboratory and clinical courses. In the current programme one nursing course could include all three types of learning experiences. This required course includes elements of the theory portions for a number of current, elective, courses..  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not available to students in other disciplines.



## THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form  
Change to Course or Program

Category: (2)

<b>Faculty:</b> Applied Science <b>Department:</b> Nursing <b>Faculty Approval Date:</b> October 24, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> October 26, 2016 <b>Contact Person:</b> Dr. Judith Lynam <b>Phone:</b> 2-7476 <b>Email:</b> Judith.lynam@nursing.ubc.ca
<b>Proposed Calendar Entry:</b> NURS 427(9) Consolidated Practice Experience <i>This course is not eligible for Credit/D/Fail grading.</i>  <b>Pre-requisite:</b> NURS430, NURS425	<b>URL:</b> NURS427  <b>Present Calendar Entry:</b> NURS 427 (8) Consolidated Practicum <del>Extended practice to integrate and consolidate professional nursing knowledge, skills, and competencies. Pass/Fail. This course is not eligible for Credit/D/Fail grading.</del> <del>Prerequisite: All of NURS 302, NURS 303, NURS 304, NURS 305, NURS 306, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 340, NURS 341, NURS 342, NURS 343. And Clinical Nursing Major.</del> <del>Corequisite: NURS 344.</del>  <b>Type of Action:</b> Modification in course title & increase in credit value of existing course.  <b>Rationale for Proposed Change:</b> The consolidated practicum has been increased in duration in response to feedback from students and clinical practice settings.  <b>X Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F:</b> This is a required course in the BSN programme and not open to students in other disciplines.  <b>X Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>





### Dean's Office: Bachelor of Fine Arts>Degree Requirements

<p><b>Category:</b> 1 <b>Faculty:</b> Arts  <b>Department:</b> Arts Academic Advising for Art History and Visual Art  Creative Writing  Theatre and Film  <b>Faculty Approval Date:</b> 2016 Oct 20, (previously reviewed FoA 2016 03 01)  <b>Effective Session (W):</b> S  <b>Effective Academic Year:</b> 2017</p>	<p><b>Date:</b> October 21, 2015  <b>Contact Person:</b> Lois Nightingale  <b>Phone:</b> 604-822-0048  <b>Email:</b> <a href="mailto:arts.curriculum@ubc.ca">arts.curriculum@ubc.ca</a></p>
<p><u>The Faculty of Arts</u>  <u>Bachelor of Fine Arts</u>  “Degree Requirements”</p> <p><b>Proposed Calendar Entry:</b></p> <p>Degree Requirements  All students in the Bachelor of Fine Arts degree program must complete the following <b>four</b> requirements<sup>1</sup>:</p> <ol style="list-style-type: none"> <li>1. Writing and Research Requirement</li> <li>2. Outside Requirement</li> <li>3. Upper-level Requirement</li> <li>4. Arts Credit Minimum Requirement</li> </ol> <p><sup>1</sup>See also <a href="#">Credit Requirements and Regulations</a>.</p> <p>[...]</p> <p><b>2. Outside Requirement</b>  <b>B.F.A. students completing a single Major or Honours program must complete a minimum of 30 credits outside their B.F.A. specialization.<sup>1</sup> These 30 credits may include credits necessary for the completion of a Minor, should the student choose to add one.</b></p> <p><b>B.F.A. students completing two Majors, two Honours, or a Major/Honours combination of programs within their degree are not required to complete elective credits outside their</b></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,197,283,1586">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,197,283,1586</a></p> <p><b>Present Calendar Entry:</b></p> <p>Degree Requirements  All students in the Bachelor of Fine Arts degree program must complete the following <del>seven</del> requirements<sup>1</sup>:</p> <ol style="list-style-type: none"> <li>1. Writing and Research Requirement</li> <li><del>2. Language Requirement</del></li> <li><del>3. Science Requirement</del></li> <li><del>4. Literature Requirement</del></li> <li>5. Outside Requirement</li> <li>6. Upper-level Requirement</li> <li>7. Arts Credit Minimum Requirement</li> </ol> <p><sup>1</sup>See also <a href="#">Credit Requirements and Regulations</a>.</p> <p>[...]</p> <p><b><del>2. Language Requirement</del></b></p> <p><del>There are three ways to satisfy the Language Requirement:</del></p> <p><del>Prior to admission, and while still in secondary school, complete a language course (excluding English) at a level equivalent to BC Grade 12.</del></p> <p><del>Pass a proficiency test. This option is particularly recommended for students who have knowledge of a language but no</del></p>



**specializations. Instead, the breadth achieved through the combination of programs is deemed to satisfy the Outside Requirement.**

**Students in the B.F.A. degree program are expected to use their Outside credits to self-specialize in well-considered areas outside their major; consultation with an Advisor in the selection of courses in these areas is encouraged. Sub-specialization in some programs may require the completion of credits taken outside the Faculty of Arts.**

<sup>1</sup>All courses normally accepted or designated as applicable towards a specialization in a field of study, including cross-listed courses, are deemed to be within that field of study. This remains true even when the course credit is not actually applied to that specialization (i.e. is taken as elective credit).

### **3. Upper-Level Requirement**

Students must complete a minimum number of upper-level credits (courses numbered 300 and above). The number of upper-level credits varies according to the degree program option chosen, as summarized in the table below. Note that the addition of a Minor to any degree program does not increase the Upper-Level requirement.

	Major	Honours	Double Major or Double Honours
Upper-level credits required:	48	54	60

### **4. Arts Credit Minimum Requirement**

Arts Credit is defined by subject area. Credit completed in subject areas identified in the UBC Calendar [course descriptions](#) as being

~~secondary school or university transcript to prove competency. No course credit is awarded for passing a proficiency test. Students must consult Arts Academic Advising.~~

~~If the language is taught at UBC, students may be able to prove competency through examination. Arrangements for such examination must first be sought from the academic department providing instruction in the language. If departmental examination or an acceptable alternative is not available, students should consult Arts Advising. If the language is not taught at UBC, students may be permitted to prove competency through a proficiency examination. Appropriate expertise to test the student's competency in the language must be available.~~

~~Reach or exceed the level specified in any of the languages taught at UBC, as listed below. Note that most of these courses have prerequisites. Students with some background in the language of their choice must check with the department teaching the language for placement prior to the beginning of classes. Note that there is no credit assignment to the Language Requirement, only a level of proficiency to be obtained.~~

Subject	Course
Arabic (ARBC)	400 or 202
Asian Languages (ASLA)	400
Chinese (CHIN)	117 or 118 (heritage students); 107 or 108 (non-heritage students)
Danish (DANI)	210
First Nations Languages (FNEL)	202 Salish



offered by the Faculty of Arts, as well as transfer credit in those subjects, is considered Arts Credit.

A minimum of 72 of the 120 credits required for the Bachelor of Fine Arts degree program must be Arts credit, except when the completion of the student's specialization(s) requires more than 48 credits outside of Arts. See [Credit Requirements and Regulations](#).

First Nations Languages (FNEL)	212 Algonquian
First Nations Languages (FNEL)	222 Dene (Athabaskan)
First Nations Languages (FNEL)	232 Tsimshanie
First Nations Languages (FNEL)	242 Wakashan
First Nations Languages (FNEL)	252 Haida
First Nations Languages (FNEL)	262 Ktunaxa (Kootenay)
First Nations Languages (FNEL)	292 Other indigenous languages
French (FREN)	112
German (GERM)	210
Greek (GREK)	200 or 202
Hebrew (HEBR)	405 or 202
Hindi-Urdu (HINU)	200 or 202
Indonesian (INDO)	200 or 202
Italian (ITAL)	202 or 203
Japanese (JAPN)	103 or 151
Korean (KORN)	200 or 202
Latin (LATN)	200 or 202
Polish (POLS)	300
Portuguese	202



	<p>(PORT)</p> <p>Punjabi (PUNJ) 200 or 202</p> <p>Russian (RUSS) 200</p> <p>Sanskrit 200 or 202 (SANS)</p> <p>Spanish (SPAN) 112 or 202</p> <p>Swedish 210 (SWED)</p> <p>Ukrainian 225 (UKRN)</p> <p><b>3. Science Requirement</b> In order to ensure the development of an understanding and appreciation of scientific methods, applications and reasoning, students must complete 6 credits chosen from any combination of:</p> <p>All courses taught by the Faculty of Science Specific courses taught by the Faculty of Arts: ASIC 200 all GEOB courses GRSJ 201 (cross-listed with CPSC 101) LING 209 PSYC science courses (263, 348, 360, 361, 363, 364, 365, 366, 367, 368, 448, 460, 461, 462, 463, 465, 466, 467, 469) Specific courses taught by the Faculty of Forestry: FRST 303, 304 Specific courses taught by the Faculty of Land and Food Systems: APBI 244, 260, 311, 327, 328; FNH 200, 250 Specific courses taught by the Faculty of Medicine: CAPS 390, 391</p> <p><b>Important Note:</b> The Faculty of Science offers several courses with overlapping content. Students may not earn credits for two courses with significant overlap. Students are advised to review the <u>Credit Exclusion Lists</u>.</p> <p><b>4. Literature Requirement</b> Students must complete 6 credits of literary</p>
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<del>study, chosen from:</del>	
<del>Subject</del>	<del>Course</del>
<del>African Studies (AFST)</del>	<del>351</del>
<del>Arabic (ARBC)</del>	<del>400, 420</del>
<del>ARTS</del>	<del>001<sup>+</sup></del>
<del>Asian Studies (ASIA)</del>	<del>212, 213, 308, 324, 326, 334, 341, 342, 347, 352, 357, 360, 361, 363, 364, 368, 392, 398, 441, 444, 447, 452, 451, 453, 454, 455, 457, 460, 464</del>
<del>Arts Studies (ASTU)</del>	<del>100A<sup>+</sup></del>
<del>Central, Eastern, and Northern European Studies (CENS)</del>	<del>202, 303</del>
<del>Chinese (CHIN)</del>	<del>411, 413, 421, 431, 433, 434, 471, 473, 481, 483, 484</del>
<del>Classical Studies (CLST)</del>	<del>310, 313, 314, 315, 317, 318, 402</del>
<del>English (ENGL)</del>	<del>Only ONE of 110<sup>+</sup>, 111<sup>+</sup>, 120<sup>+</sup>, or 121<sup>+</sup> can be used toward the Literature Requirement</del>
	<del>All 200-, 300- and 400-level courses, except 229, 301-340, 352, 399, 409, 412</del>
<del>French (FREN)</del>	<del>220, 221, 280, 320, 321, 328, 329, 330, 348, 349, and all 400-level courses except 427, 457-475, 499</del>
<del>French, Hispanic &amp; Italian Studies</del>	<del>333</del>



	(FHIS)	
	Gender, Race, Sexuality, and Social Justice Studies (GRSJ)	224
	German (GERM)	301, 302, 303–305, 360, 370, 380, 390, 401, 402, 405–407
	Greek (GREK)	301, 351, 352, 401, 402
	Hebrew (HEBR)	479
	Hindi-Urdu (HINU)	400
	Italian (ITAL)	303, 304, 403–409, 420
	Italian Studies (ITST)	231, 232, 333, 345, 385, 413–419, 421
	Japanese (JAPN)	311, 312, 342, 401, 402, 406, 408
	Korean (KORN)	410
	Latin (LATN)	301, 350, 351, 401, 402
	Medieval Studies (MDVL)	301, 302
	Philosophy (PHIL)	375
	Polish (POLS)	345, 424
	Portuguese (PORT)	392
	Punjabi (PUNJ)	300, 301, 302, 401, 402
	Religious studies (RELG)	201, 203, 311, 320
	Romance Studies (RMST)	221, 222, 420
	Russian (RUSS)	206, 207, 305, 306, 407–412
	Sanskrit (SANS)	300 <sup>2</sup>
	Scandinavian (SCAN)	333–336, 411–413
	Slavic Studies (SLAV)	307



	South Asian Languages (SOAL)	440 <sup>2</sup>	
	Spanish (SPAN)	221, 222, 312, 357, 358, 364, 365, 406, 410, 420, 430, 470, 490	
	Theatre (THTR)	210, 211, 245, 310, 311, 410	
	<sup>+</sup> Students may count one of ENGL 110, 111, 120 or 121 or 3 credits of ASTU 100A or 3 credits of ARTS 001 toward the Literature Requirement. Credits for ASTU 100A or ARTS 001 may be split between the Writing Component of the Writing and Research Requirement and the Literature Requirement.		
	<sup>2</sup> With the permission of the Department of Asian Studies.		
	<b>5. Outside Requirement</b>		
	Students must complete a minimum number of credits outside the field of study of their specialization(s). <sup>+</sup>		
-	<b>Major</b>	<b>Honours</b>	<b>Double Major, Double Honours or Adding a Minor</b>
Outside credits required:	60	48	24 (outside both fields of study)
	<sup>+</sup> All courses normally accepted or designated as applicable towards a specialization in a field of study, including cross-listed courses, are deemed to be within that field of study. This remains true even when the course credit is not actually applied to that specialization (i.e. is taken as elective credit).		
	<b>6. Upper-Level Requirement</b>		
	Students must complete a minimum number of upper-level credits (courses numbered 300 and above). The number of upper-level credits		



varies according to the degree program option chosen, as summarized in the table below. Note that the addition of a Minor to any degree program does not increase the Upper-Level requirement.

	Major	Honours	Double Major or Double Honours
Upper-level credits required:	48	54	60

#### **7. Arts Credit Minimum Requirement**

Arts Credit is defined by subject area. Credit completed in subject areas identified in the UBC Calendar [course descriptions](#) as being offered by the Faculty of Arts, as well as transfer credit in those subjects, is considered Arts Credit.

A minimum of 72 of the 120 credits required for the Bachelor of Fine Arts degree program must be Arts credit, except when the completion of the student's specialization(s) requires more than 48 credits outside of Arts. See [Credit Requirements and Regulations](#).

#### **Type of Action:**

Remove degree requirements in Language, Literature, and Science. Amend Outside Requirement to a minimum of 30 credits outside the BFA program specialization.

#### **Rationale for Proposed Change:**

BFA degrees, like the BMus, BMS, and BASc, are highly specialized and include many more prescribed courses than a BA – up to 90 credits at other leading institutions. Unlike “broad liberal arts” programs, learning outcomes for BFA programs and courses relate closely to the professional practice of their specialized areas, and effective study can include significant amounts of time-consuming practice-based





	<p>learning. Thus BFA degree programs are more highly structured than BA degrees and there is less room for “exploration” of other areas of knowledge. The prescribed Arts requirements for Language, Literature, and Science narrow this opportunity for exploring even further. In some cases, we’ve seen the required Language / Literature / Science prescription discourage students from taking courses that would better support future interests, such as Film Production students not pursuing select Electrical Engineering courses. The complexities of accommodating the prescribed “Breadth” requirements alongside those of the BFA can culminate in discouraging BFA students from pursuing a Minor in areas that would support their unique future employment or graduate goals. Given this, we’re convinced a more flexible system for achieving essential undergraduate “breadth” will better serve students’ individual needs, will bring the BFA degrees more in line with other specialized degrees, such as the BMus or the BASc, and make the BFA at UBC a more competitive and effective option for undergraduate study.</p>
<p><u>The Faculty of Arts</u>  <u>Bachelor of Fine Arts</u>  <b>Credit Requirements and Regulations</b></p> <p><b>Proposed Calendar Entry:</b></p> <p>Credit Requirements and Regulations</p> <p>Degree and Arts Credit Minimum</p> <p>In order to earn their degree, students must complete at least 120 B.F.A.-eligible credits. Of these 120, at least 72 must be taken within the Faculty of Arts<sup>1</sup> (see below).</p> <p>A minimum of 50% of total degree credits, 50% of upper-level degree credits, and 50% of upper-level specialization credits (Honours, Major or Minor) must be</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,197,283,1585">http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,197,283,1585</a></p> <p><b>Present Calendar Entry:</b></p> <p>Credit Requirements and Regulations</p> <p>Degree and Arts Credit Minimum</p> <p>In order to earn their degree, students must complete at least 120 B.F.A.-eligible credits. Of these 120, at least 72 must be taken within the Faculty of Arts<sup>1</sup> (see below).</p> <p>A minimum of 50% of total degree credits, 50% of upper-level degree credits, and 50% of upper-level specialization credits (Honours, Major or Minor) must be completed while</p>



completed while registered as a student in the Faculty of Arts.

<sup>1</sup>Second degree students must consult [Second Degree Studies](#).

#### Granting of Credit

Credit is granted for all courses completed with at least the minimum passing grade (normally 50%).

#### B.F.A.-eligible Credit

Credit may be applied toward completion of the Bachelor of Fine Arts degree program as follows:

- Credit from any course in the Faculty of Arts, with the exception of certain MUSC courses, may be applied to the degree.
  - Note that while all courses in music history, music theory, ethnomusicology, or music composition are acceptable, a maximum of 8 credits from the ensemble courses in musical performance may be applied. Credit from individual **lessons** is not applicable to the B.F.A.
- Credit earned in Co-operative Work Placement courses is not applicable towards the Bachelor of Fine Arts. See Arts [Co-operative Education Programs](#).
- No more than 60 credits of Distance Learning courses can be applied towards the Bachelor of Fine Arts, and no more than 42 such credits may be taken in the final 60 credits of the degree program.
- A maximum of 48 credits from outside the Faculty of Arts may be applied towards the degree.

registered as a student in the Faculty of Arts.

<sup>1</sup>Second degree students must consult [Second Degree Studies](#).

#### Granting of Credit

Credit is granted for all courses completed with at least the minimum passing grade (normally 50%).

#### B.F.A.-eligible Credit

Credit may be applied toward completion of the Bachelor of Fine Arts degree program as follows:

- Credit from any course in the Faculty of Arts, with the exception of certain MUSC courses, may be applied to the degree.
  - Note that while all courses in music history, music theory, ethnomusicology, or music composition are acceptable, a maximum of 8 credits from the ensemble courses in musical performance may be applied. Credit from individual ~~performance courses~~ is not applicable to the B.F.A.
- Credit earned in Co-operative Work Placement courses is not applicable towards the Bachelor of Fine Arts. See Arts [Co-operative Education Programs](#).
- No more than 60 credits of Distance Learning courses can be applied towards the Bachelor of Fine Arts, and no more than 42 such credits may be taken in the final 60 credits of the degree program.
- A maximum of 48 credits from outside the Faculty of Arts may be applied towards the degree.

In the 120 credits required and acceptable for the degree, there may be:



In the 120 credits required and acceptable for the degree, there may be:

- a maximum of 60 credits transferred into the Faculty of Arts; see [Transfer and Exchange Credit](#); and
- a maximum of 72 credits in courses at the 100- and 200-level; and
- a maximum of **9** credits, at the 500-level.

See [Registration](#).

#### Course Equivalency and Credit Exclusion

Students may not earn credit for two courses with significant and pre-defined content overlap. Students are fully responsible for their registration, and are advised to check the Course Schedule for course equivalencies and to review the [Science Credit Exclusion Lists](#) to avoid unnecessary registration. Note that credit exclusion does not imply that courses are interchangeable, and meeting specialization requirements may necessitate the completion of a specific course. Students registering in courses dealing with probability and statistics should exercise particular caution.

#### Credit/D/Fail

Bachelor of Fine Arts students are permitted to take a limited number of eligible elective credits under the Credit/D/Fail grading scheme. The purpose of allowing this grading scheme is to encourage exploration of subject matter outside the student's program of study, to emphasize learning and academic exploration of the new and unfamiliar, and to expose students to a broader-based curriculum. See [Credit/D/Fail](#). Students should note, however, that many B.F.A. programs may not be able to accommodate this option due to the small number of elective credits in the program.

- a maximum of 60 credits transferred into the Faculty of Arts; see [Transfer and Exchange Credit](#); and
  - a maximum of 72 credits in courses at the 100- and 200-level; and
  - a maximum of ~~two~~ courses, or **8** credits, at the 500-level.
- See [Registration](#).

#### Course Equivalency and Credit Exclusion

Students may not earn credit for two courses with significant and pre-defined content overlap. Students are fully responsible for their registration, and are advised to check the Course Schedule for course equivalencies and to review the [Science Credit Exclusion Lists](#) to avoid unnecessary registration. Note that credit exclusion does not imply that courses are interchangeable, and meeting specialization requirements may necessitate the completion of a specific course. Students registering in courses dealing with probability and statistics should exercise particular caution.

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Bachelor of Fine Arts students are permitted to take a limited number of eligible elective credits under the Credit/D/Fail grading scheme. The purpose of allowing this grading scheme is to encourage exploration of subject matter outside the student's program of study, to emphasize learning and academic exploration of the new and unfamiliar, and to expose students to a broader-based curriculum. See [Credit/D/Fail](#). Students should note, however, that many B.F.A. programs may not be able to accommodate this option due to the small number of elective credits in the program.

Students should further be aware that there are strict rules about how credit earned with Credit/D/Fail grading may be applied to a degree. Choosing the wrong grading scheme



<p>Students should further be aware that there are strict rules about how credit earned with Credit/D/Fail grading may be applied to a degree. Choosing the wrong grading scheme may result in the need to take extra courses to complete degree requirements. Students considering this grading scheme are strongly encouraged to speak with an Academic Advisor for course planning and to check Degree Navigator after registration.</p> <p>Credit earned with Credit/D/Fail grading may not be applied toward any of the following <a href="#">Degree Requirements</a>:</p> <ol style="list-style-type: none"> <li>1. current or future specialization(s);</li> <li>2. the Writing and Research Requirement;</li> <li>3. the Upper-Level Requirement; and</li> <li>4. the Outside Requirement</li> </ol> <p>Students who have not yet declared or been accepted into their specialization(s) should be particularly cautious when choosing this grading scheme. Students considering transferring to a new specialization or degree, or those contemplating a future application to Education, Law, Graduate Studies, Medicine, Dentistry, or other professional programs should check those programs' websites.</p> <p>Auditing Courses</p> <p>Prior to the <a href="#">drop deadline</a>, students may seek permission from the course instructor to audit a course. If permission is granted, and the course is completed to the satisfaction of the instructor, the course will appear on the transcript without credit. If the course is not satisfactorily completed, Fail (F) standing will appear on the transcript. Note that not all courses permit auditing and, as no credit is earned, audited courses may not be used to satisfy program or degree requirements.</p> <p>Double-Counting</p>	<p>may result in the need to take extra courses to complete degree requirements. Students considering this grading scheme are strongly encouraged to speak with an Academic Advisor for course planning and to check Degree Navigator after registration.</p> <p>Credit earned with Credit/D/Fail grading may not be applied toward any of the following <a href="#">Degree Requirements</a>:</p> <ol style="list-style-type: none"> <li><del>1.</del> current or future specialization(s);</li> <li><del>2.</del> the Writing and Research Requirement;</li> <li><del>3.</del> <del>the Literature Requirement;</del></li> <li><del>4.</del> <del>the Science Requirement;</del></li> <li><del>5.</del> <del>the final course for the Language Requirement;</del></li> <li><del>6.</del> the Upper-Level Requirement; and</li> <li><del>7.</del> the Outside Requirement.</li> </ol> <p>Students who have not yet declared or been accepted into their specialization(s) should be particularly cautious when choosing this grading scheme. Students considering transferring to a new specialization or degree, or those contemplating a future application to Education, Law, Graduate Studies, Medicine, Dentistry, or other professional programs, should check those programs' websites.</p> <p>Auditing Courses</p> <p>Prior to the <a href="#">drop deadline</a>, students may seek permission from the course instructor to audit a course. If permission is granted, and the course is completed to the satisfaction of the instructor, the course will appear on the transcript without credit. If the course is not satisfactorily completed, Fail (F) standing will appear on the transcript. Note that not all courses permit auditing and, as no credit is earned, audited courses may not be used to satisfy program or degree requirements.</p> <p>Double-Counting</p>
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Double-counting is defined as applying credit from the same upper-level course towards requirements in two different specializations. Students enrolled in dual specializations are allowed to double-count credits between the two specializations, up to the following limits:

Dual-Specialization combination	Double-counting maximum
Major and Minor	6 credits
Double Major	9 credits
Honours and Minor	9 credits
Honours and Major	12 credits
Double Honours	12 credits

Double-counting does not reduce the minimum number of upper-level credits required to complete the degree. See Summary, below.

Note: Applying credit from the same upper-level course towards more than one degree requirement, or towards both a degree requirement and a specialization-specific requirement, is not considered as double counting. For example, using **VISA 380** to fulfill 3 credits of the Bachelor of Fine Arts **Upper-Level** Requirement as well as 3 credits of upper-level **VISA** for the Major in **Visual Arts** is not defined as double-counting.

#### Summary

The following table summarizes the minimum credits required for various [degree program options](#). Note that some specializations and combinations of specializations may exceed these minimums.

Summary of Credit Requirements for B.F.A.

Double-counting is defined as applying credit from the same upper-level course towards requirements in two different specializations. Students enrolled in dual specializations are allowed to double-count credits between the two specializations, up to the following limits:

Dual-Specialization combination	Double-counting maximum
Major and Minor	6 credits
Double Major	9 credits
Honours and Minor	9 credits
Honours and Major	12 credits
Double Honours	12 credits

Double-counting does not reduce the minimum number of upper-level credits required to complete the degree. See Summary, below.

Note: Applying credit from the same upper-level course towards more than one degree requirement, or towards both a degree requirement and a specialization-specific requirement, is freely permitted, and is not considered to be double-counting. For example, using ~~PSYC 361~~ to fulfill 3 credits of the Bachelor of Fine Arts ~~Science~~ Requirement as well as 3 credits of upper-level ~~PSYC~~ for the Major in ~~Psychology~~ is not defined as double-counting, ~~nor is using credit from PSYC 361 towards both the Science Requirement and the degree's Upper-Level Requirement.~~

#### Summary

The following table summarizes the minimum credits required for various [degree program options](#). Note that some specializations and combinations of specializations may exceed these minimums.

Summary of Credit Requirements for B.F.A.



	Total Credits	of which courses 300 +	Total credits with specialization(s) <sup>1</sup>	of which courses 300 +	Total credits outside Major and/or Honours		Total Credits	of which courses 300 +	Total credits within specialization(s) <sup>1</sup>	of which courses 300 +	Total credits outside specialization(s) <sup>1</sup>
Major	120	48	42	30	30	Major	120	48	42	30	60
Major+	120	48	42+	30+	30 <sup>2</sup>	Major+	120	48	42+30	30+18	24
Minor			30	18		Minor					
Double	120	60	42+	30+	0 <sup>3</sup>	Double	120	60	42+42	30+30	24
Major			42	30		Major					
Honours	120	54	60	48	30	Combined	120	48	30+30	18+18	48
Honours	120	54	60	48+	30 <sup>2</sup>	and					
+Minor			+30	18		Major					
			0			or					
Honours	120	60	60	48+	0 <sup>3</sup>	Honours	120	54	60	48	48
+Major			+42	30		Dou	120	60	60+60	48+48	24
			2			ble					
Double	120	60	60+	48+	0 <sup>3</sup>	Honours					
Honours			60	48		<sup>1</sup> May					
						vary					
						by					
						specialization.					

<sup>1</sup> May vary by specialization.

<sup>2</sup> 30 credits outside Major/Honours may include credits for Minor.

<sup>3</sup> Breadth is achieved through the



**completion of two Major/Honours programs; no additional outside credit is required, except as necessary to satisfy the Writing Component of the Writing and Research Requirement.**

**Type of Action:**

Revise credit requirement minimums to reflect current practice in BFA programs.

In Section:

B.F.A.-eligible Credit: change the maximum credit available from Graduate level coursework.

Credit/D/Fail: update the table to remove requirements no longer needed in the BFA and renumber the table.

**Rationale for Proposed Change:**

*Note: This category 2 proposal is linked to the Category 1 BFA Degree Requirements proposal. The two should move through the curriculum process together.*

BFA degrees, like the BMus, BMS, and BASc, are highly specialized and include many more prescribed courses than a BA. Some BFA programs will specify a large number of required credits – up to 81 credits for some specializations. (Learning outcomes for BFA programs and courses relate closely to the professional practice of their specialized areas, and effective study can include significant amounts of time-consuming practice-based learning.)

In the current calendar model, these intensive BFA specialization options have been treated as equivalent to “Honours” degree programs. The revisions to the Arts calendar entries (submitted by Arts) provide an opportunity to normalize this anomaly, since BFA programs will now have a unique credit requirement page.

These changes also support and reflect the accompanying proposal to revise the BFA degree’s requirements. The complexities of accommodating the prescribed “Breadth” requirements alongside those of the BFA can culminate in discouraging BFA students from pursuing a Minor in areas that would support their unique future employment or graduate





	<p>goals. A more flexible system for achieving essential undergraduate “breadth” will better serve students’ individual needs, and will bring the BFA degrees more in line with other specialized degrees.</p>
<p><u>The Faculty of Arts</u>  <u>Bachelor of Fine Arts</u>  “Degree Program Options”</p> <p><b>Proposed Calendar Entry:</b></p> <p>Degree Program Options  <b>S</b>tudents may apply to enter the Bachelor of Fine Arts degree and one of the programs listed below; see <a href="#">Admission and Transfer</a> for <b>more information.</b></p> <p>Students may change their program without penalty throughout their degree, but must complete at least one Major or Honours program prior to graduation. A maximum of two specializations is permitted. Students are responsible for ensuring they meet all degree and program requirements.</p> <ul style="list-style-type: none"> <li>• <b>Major program:</b> This program involves specialization in a single field of study.</li> <li>• <b>Double Major program:</b> This program involves specialization in two fields of study. It is an ambitious program allowing a dual focus, but with few electives outside the subjects of the Majors. More than 120 credits may be required to complete this program.</li> <li>• <b>Honours program:</b> This program involves intense specialization in a single field of study and is open only to students who have shown special aptitude. Entry requires high academic standing. Departments may also specify stringent continuation and graduation requirements.</li> <li>• <b>Double Honours program:</b></li> </ul>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,197,283,1587">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,197,283,1587</a></p> <p><b>Present Calendar Entry:</b></p> <p>Degree Program Options  <del>After completing between 27 and 54 credits at UBC or elsewhere, and through a competitive admission process,</del> students may apply to enter the Bachelor of Fine Arts degree and one of the programs listed below. <del>The number of credits required for admission and the admission process is determined by each Department.</del> See <a href="#">Admission and Transfer</a>.</p> <p>Students may change their program without penalty throughout their degree, but must complete at least one Major or Honours program prior to graduation. A maximum of two specializations is permitted. Students are responsible for ensuring they meet all degree and program requirements.</p> <ul style="list-style-type: none"> <li>• <b>Major program:</b> This program involves specialization in a single field of study <del>while retaining elective space for broader exploration.</del></li> <li>• <b>Double Major program:</b> This program involves specialization in two fields of study. It is an ambitious program allowing a dual focus, but with few electives outside the subjects of the Majors. More than 120 credits may be required to complete this program.</li> <li>• <b>Honours program:</b> This program involves intense specialization in a single field of study and is open only to students who have shown special aptitude. Entry requires high academic</li> </ul>





This program involves intense specialization in two fields of study and is open only to students who have shown special aptitude. Entry requires high academic standing. Departments may also specify stringent continuation and graduation requirements. More than 120 credits will be required to complete this program.

- **Minor Program:** This program, **chosen from any of the Minor Programs available to students in the Faculty of Arts<sup>1</sup>**, can be added to a Major or Honours program. **It allows** a dual focus with a smaller concentration complementing the primary program. Some Minors may be self-declared via the [Student Service Centre](#) (SSC) while others permit admission only through a competitive application process.

<sup>1</sup>Note that students completing a B.F.A. Major/Honours in Creative Writing, Theatre or Visual Arts may not also complete a B.A. Minor in the same discipline.

Students are also invited to consider the following program:

- **Double Major in Fine Arts and Arts:** This program allows students to complete both a Fine Arts (B.F.A.) Major or Honours and an Arts (B.A.) Major or Honours within their B.F.A. degree. Students are advised to meet with an Arts Academic Advisor as early as possible to discuss program planning. Note that students **in the B.F.A. programs in Acting, Design and Production, and Film Production will need to complete more than 120 credits for a Double Major;**

standing. Departments may also specify stringent continuation and graduation requirements.

- **Double Honours program:** This program involves intense specialization in two fields of study and is open only to students who have shown special aptitude. Entry requires high academic standing. Departments may also specify stringent continuation and graduation requirements. More than 120 credits will be required to complete this program.
- **Minor Program:** This program can be added to a Major or Honours program, **allowing** a dual focus with a smaller concentration complementing the primary program. Some Minors may be self-declared via the [Student Service Centre](#) (SSC) while others permit admission only through a competitive application process.

<sup>1</sup>Note that students completing a B.F.A. Major/Honours in Creative Writing, Theatre or Visual Arts may not also complete a B.A. Minor in the same discipline.

Students are also invited to consider the following programs:

- **Double Major in Fine Arts and Arts:** This program allows students to complete both a Fine Arts (B.F.A.) Major or Honours and an Arts (B.A.) Major or Honours within their B.F.A. degree. Students are advised to meet with an Arts Academic Advisor as early as possible to discuss program planning. ~~Students who successfully complete both programs may choose to graduate with either a Bachelor of Fine Arts or a Bachelor of Arts degree.~~ Note that students ~~completing a B.F.A. Major/Honours in Creative Writing, Theatre or Visual Arts may not also complete a B.A. Major/Honours in the~~



<p><b>those in Theatre or Visual Arts may not also complete a B.A. Major/Honours in the same discipline.</b></p> <ul style="list-style-type: none"> <li>• <b>Double Major in Fine Arts and Science:</b> This program allows students to complete both a Fine Arts (B.F.A.) Major or Honours and a Science Major within their B.F.A. degree. Students are advised to meet with an Arts Academic Advisor as early as possible to discuss program planning. They are further advised that many Science Majors require a separate application process, usually in second year; students should consult the website and/or meet with the Departmental Advisor in the Science program of their choice as early as possible. See the Arts Undergraduates <a href="#">website</a>.</li> <li>• <b>Dual Degree Program:</b></li> <li>• <b>Bachelor of Fine Arts and Master of Management:</b> This ambitious program offers qualified students the opportunity to earn, in one extended program of study, a Bachelor of Fine Arts degree and a Master of Management degree from the Faculty of Commerce and Business Administration (Sauder School of Business). Students should consult <a href="#">Arts Academic Advising</a> as well as the <a href="#">Dual Degree Program Option: Bachelor of Fine Arts and Master of Management</a>.</li> </ul> <p>Major Program Completion of a BFA Major requires at least <b>42</b> credits in one field of study. The</p>	<p><del>same discipline.</del></p> <ul style="list-style-type: none"> <li>• <b>Double Major in Fine Arts and Science:</b> This program allows students to complete both a Fine Arts (B.F.A.) Major or Honours and a Science Major within their B.F.A. degree. Students are advised to meet with an Arts Academic Advisor as early as possible to discuss program planning. They are further advised that many Science Majors require a separate application process, usually in second year; students should consult the website and/or meet with the Departmental Advisor in the Science program of their choice as early as possible. See the Arts Undergraduates <a href="#">website</a>.</li> <li>• <b>Dual Degree Program Option<sup>†</sup>:</b> This ambitious program option offers qualified students the opportunity to earn, in one extended program of study, a Bachelor of Fine Arts degree and a Master of Management degree from the Faculty of Commerce and Business Administration (Sauder School of Business). A formal application is required for admission. Students should consult <a href="#">Arts Academic Advising</a> as well as the <a href="#">Dual Degree Program Option: Bachelor of Fine Arts and Master of Management</a>.</li> </ul> <p><del><sup>†</sup>The Dual Degree Program Option, Bachelor of Fine Arts and Master of Management, is the only dual-degree program option currently available to B.F.A. students.</del></p> <p>Major Program Completion of a Major requires at least <b>39</b> credits in one field of study. The following requirements must also be met:</p> <ul style="list-style-type: none"> <li>• a minimum of 30 credits for the Major must be numbered 300 and higher;</li> <li>• a minimum of 48 credits for the degree must be numbered 300 and higher (these can include credits for the</li> </ul>
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following requirements must also be met:

- a minimum of 30 credits within the specialization must be numbered 300 and higher;
- a minimum of 48 credits for the degree must be numbered 300 and higher (these can include credits for the Major); and
- a minimum of **30** credits for the degree must be outside of the Major.<sup>1</sup>

#### Double Major Program

Completion of a Double Major requires at least 42 credits in each of the two fields of study. The following requirements must also be met:

- a minimum of 30 credits for each Major must be numbered 300 or higher<sup>2</sup>; **and**
- a minimum of 60 credits for the degree must be numbered 300 and higher (normally completed by satisfying the 30 upper-level credit requirement in each Major<sup>2</sup>).

**Note: Double majors in some BFA programs will require more than 120 credits.**

#### Honours Program

Completion of Honours requires at least 60 credits in one field of study. The following requirements must also be met:

- a minimum of 48 credits for Honours must be numbered 300 or higher;
- a minimum of 54 credits for the degree must be in courses numbered 300 or higher; and
- a minimum of **30** credits must be outside Honours.<sup>1,3</sup>

#### Double Honours

Completion of a Double Honours requires at least 60 credits in each of the two fields of

Major); and

- a minimum of ~~60~~ credits for the degree must be outside of the Major.<sup>1</sup>

#### Double Major Program

Completion of a Double Major requires at least 42 credits in each of the two fields of study.

The following requirements must also be met:

- a minimum of 30 credits for each Major must be numbered 300 or higher;<sup>2</sup>
- a minimum of 60 credits for the degree must be numbered 300 and higher (normally completed by satisfying the 30 upper-level credit requirement in each Major<sup>2</sup>); ~~and~~
- ~~a minimum of 24 credits for the degree must be outside both Majors.~~<sup>1</sup>

#### Honours Program

Completion of Honours requires at least 60 credits in one field of study. The following requirements must also be met:

- a minimum of 48 credits for Honours must be numbered 300 or higher;
- a minimum of 54 credits for the degree must be in courses numbered 300 or higher; and
- a minimum of ~~48~~ credits must be outside Honours.<sup>1,3</sup>

#### Double Honours

Completion of a Double Honours requires at least 60 credits in each of the two fields of study, so will normally require more than 120 total credits for the degree. The following requirements must also be met:

- a minimum of 48 credits for each Honours must be numbered 300 or higher;<sup>4</sup>
- ~~a minimum of 24 credits for the degree must be outside both Honours.~~<sup>1</sup>

#### Addition of a Minor

Students completing a single specialization (Major or Honours) may also choose to



study, so will normally require more than 120 total credits for the degree. The following requirements must also be met:

- a minimum of 48 credits for each Honours must be numbered 300 or higher.<sup>4</sup>

#### Addition of a Minor

Students completing a single specialization (Major or Honours) may also choose to complete a Minor. Completion of a Minor requires between 18 and 36 credits in addition to the requirements for the primary specialization. The following requirements must also be met:

- a minimum of 18 credits for the Minor must be numbered 300 or higher<sup>5</sup>.

<sup>1</sup> All courses normally accepted or designated as applicable towards a specialization in a field of study, including cross-listed courses, are deemed to be within that field of study. This remains true even when the course credit is not actually applied to that specialization (i.e. is taken as elective credit).

<sup>2</sup>Note: A maximum of 9 credits numbered 300 and higher may be double-counted between the two Majors. Regardless of double-counting, students must complete 60 upper-level credits for the degree. See [Credit Requirements and Regulations](#).

<sup>3</sup> For Honours specializations that exceed **90** credits, the Outside requirement will be reduced to accommodate the degree within 120 total credits.

<sup>4</sup>Note: A maximum of 12 credits numbered 300 and higher may be double-counted between the two Honours. Regardless of double-counting, students must complete at least 60 upper-level credits for the degree. See [Credit Requirements and Regulations](#).

<sup>5</sup> Note: A maximum of 6 credits numbered 300 and higher may be double-counted between a Major and a Minor. A maximum of 9 credits numbered 300 and higher may be

complete a Minor. Completion of a Minor requires between 18 and 36 credits in addition to the requirements for the primary specialization. The following requirements must also be met:

- a minimum of 18 credits for the Minor must be numbered 300 or higher<sup>5</sup>; ~~and~~
- ~~a minimum of 24 credits must be outside both specializations.~~<sup>4</sup>

<sup>1</sup> All courses normally accepted or designated as applicable towards a specialization in a field of study, including cross-listed courses, are deemed to be within that field of study. This remains true even when the course credit is not actually applied to that specialization (i.e. is taken as elective credit).

<sup>2</sup>Note: A maximum of 9 credits numbered 300 and higher may be double-counted between the two Majors. Regardless of double-counting, students must complete 60 upper-level credits for the degree. See [Credit Requirements and Regulations](#).

<sup>3</sup> For Honours specializations that exceed **60** credits, the Outside requirement will be reduced to accommodate the degree within 120 total credits.

<sup>4</sup>Note: A maximum of 12 credits numbered 300 and higher may be double-counted between the two Honours. Regardless of double-counting, students must complete at least 60 upper-level credits for the degree. See [Credit Requirements and Regulations](#).

<sup>5</sup> Note: A maximum of 6 credits numbered 300 and higher may be double-counted between a Major and a Minor. A maximum of 9 credits numbered 300 and higher may be double-counted between Honours and a Minor. Regardless of double-counting, students must complete the total number of upper-level credits required for the degree. See [Credit Requirements and Regulations](#).

#### Type of Action:

Wording is changed to reflect direct entry from



<p>double-counted between Honours and a Minor. Regardless of double-counting, students must complete the total number of upper-level credits required for the degree. See <a href="#">Credit Requirements and Regulations</a>.</p>	<p>secondary school, and credit limits are revised to reflect current practice.</p> <p><b>Rationale for Proposed Change:</b>  <i>Note: This category 2 proposal is linked to the category 1 BFA Admission and Transfer proposal.</i></p> <p>Direct entry is a vital change that will support the unique nature of the BFA options, and credit minimums should match actual practice in the BFA programs. The BFA degree programs seek to provide for direct entry from secondary school. This change would improve recruitment and retention, as well as normalizing these degrees, which are distinct degree programs like the Bachelor of Music (BMus), the Bachelor of International Economics BIE), and the Bachelor of Media Studies (BMS). UBC-O already provides for direct entry into their BFA programs. With the proposed direct-entry structure, students could still enter the BFA programs in second or third year and current transfer arrangements from other post-secondary institutions would be unaffected.</p>
<p><u>The Faculty of Arts</u>  <u>Bachelor of Fine Arts</u>  Registration</p> <p><b>Proposed Calendar Entry:</b></p> <p>Registration</p> <p>Every student is responsible for designing a program of study that meets degree and <b>departmental/program</b> requirements, and is encouraged to consult appropriate Academic Advising staff for assistance with program planning. The student retains all responsibility for meeting requirements.</p> <p>General Regulations</p> <p>Students are encouraged to register on their</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,197,283,1588#22744">http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,197,283,1588#22744</a></p> <p><b>Present Calendar Entry:</b></p> <p>Registration</p> <p>Every student is responsible for designing a program of study that meets degree and <del>departmental</del> requirements, and is encouraged to consult appropriate Academic Advising staff for assistance with course and program planning. The student retains all responsibility for meeting requirements.</p> <p>General Regulations</p> <p>Students are encouraged to register on their</p>



assigned date of registration, noting that admission to a degree program or specialization does not guarantee that space will be available in any specific course or section, and that not all courses are offered each year. It is **the** student's responsibility to ensure they meet course pre-requisites, co-requisites or other registration restrictions or requirements. Students are encouraged to consult **D**epartmental **A**dvising offices for information about posted registration restrictions.

Students are responsible for their registration, and are expected to verify the courses and sections in which they are registered. Students may not attend courses, or sections of courses, other than those in which they are registered. Registration in conflicting course activities is not permitted. Those who register on waiting list must check their registration to determine whether they have been placed in the course by the department, noting that such changes in registration may occur after classes start.

#### Program Planning

**B.F.A students should consult the individual B.F.A. program pages and adhere to the specific requirements of their B.F.A. program. Students are also encouraged to consult with their Departmental Advisors about B.F.A requirements.**

Students planning their 100- and 200-level courses should be aware **of their program's** lower-level requirements, and **remember that** many upper-level courses have lower-level prerequisites. Students are advised to select their first 60 credits with their entire program in mind.

Students in their first 30 credits of university-level study are encouraged to register primarily in 100-level Arts courses. Students

assigned date of registration, noting that admission to a degree program or specialization does not guarantee space will be available in any specific course or section, and that not all courses are offered each year. It is **each** student's responsibility to ensure they meet course pre-requisites, co-requisites and other registration restrictions or requirements. Students are encouraged to consult **d**epartmental **a**dvising offices for information about posted registration restrictions.

Students are responsible for their registration, and are expected to verify the courses and sections in which they are registered. Students may not attend courses, or sections of courses, other than those in which they are registered. Registration in conflicting course activities is not permitted. Those who register on waiting lists must ~~check~~ their registration to determine whether they have been placed in the course by the department, noting that such changes in registration may occur after classes start.

#### Program Planning

Students planning their 100- and 200-level courses should be **aware that most specializations have** lower-level requirements, and many upper-level courses have lower-level prerequisites. Students are advised to select their first 60 credits with their entire program in mind.

Students in their first 30 credits of university-level study are encouraged to register primarily in 100-level Arts courses. Students granted advanced credit may register in courses for





<p>granted advanced credit may register in courses for which this credit serves as a prerequisite, but are advised to register primarily in lower-level courses while completing their first year of university-level study.</p> <p>Students in their second 30 credits of university-level study are encouraged to register primarily at the 100- and 200-level, <b>with a focus</b> on their intended specialization(s). While students may register in any course for which they meet the pre-requisites, they should be mindful that upper-level courses are generally designed for students already well-prepared for advanced study in the subject area.</p> <p>Students in their upper years of study may register in any course for which they meet course pre-requisites, co-requisites or other registration restrictions or requirements. Some courses do not permit 4th year students to register. Students are encouraged to ensure that they register in courses necessary for their specialization(s) and degree requirements.</p> <p>Students may not earn credit for two courses with significant and pre-defined content overlap. Students are fully responsible for their registration, and are advised to check the Course Schedule for course equivalencies and to review the <a href="#">Science Credit Exclusion Lists</a> to avoid unnecessary registration. Note that credit exclusion does not imply that courses are interchangeable, and meeting specialization requirements may necessitate the completion of a specific course. Students registering in courses dealing with probability and statistics should exercise particular caution.</p> <p>Students seeking entry into language courses beyond the introductory level and in need of advising on which course to choose should</p>	<p>which this credit serves as a prerequisite, but are advised to register primarily in lower-level courses while completing their first year of university-level study.</p> <p>Students in their second 30 credits of university-level study are encouraged to register primarily at the 100- and 200-level, <b>and to begin focusing</b> on their intended specialization(s). While students may register in any course for which they meet the pre-requisites, they should be mindful that upper-level courses are generally designed for students already well-prepared for advanced study in the subject area.</p> <p>Students in their upper years of study may register in any course for which they meet course pre-requisites, co-requisites or other registration restrictions or requirements. Some courses do not permit 4th year students to register. Students are encouraged to ensure that they register in courses necessary for their specialization(s) and degree requirements.</p> <p>Students may not earn credit for two courses with significant and pre-defined content overlap. Students are fully responsible for their registration, and are advised to check the Course Schedule for course equivalencies and to review the <a href="#">Science Credit Exclusion Lists</a> to avoid unnecessary registration. Note that credit exclusion does not imply that courses are interchangeable, and meeting specialization requirements may necessitate the completion of a specific course. Students registering in courses dealing with probability and statistics should exercise particular caution.</p> <p>Students seeking entry into language courses beyond the introductory level and in need of advising on which course to choose should consult the department teaching the language.</p> <p>Credit Load ...</p>
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consult the department teaching the language.	Registration and the Writing Component ...
Credit Load ...	Registration in Graduate Courses
Registration and the Writing Component ...	Outstanding undergraduate students may apply to the Faculty of Graduate and Postdoctoral Studies for permission to register in a maximum of <del>two</del> courses, or <del>8</del> credits, at the 500-level. Students must receive the permission of the course instructor, Arts Academic Advising, and the Faculty of Graduate and Postdoctoral Studies. Normally such permission will be given only to students who have completed 75% of their 300- and 400-level requirements (no fewer than 36 credits at the upper-level) with a minimum overall average of 76%.
Registration in Graduate Courses	Change of Registration ...
Outstanding undergraduate students may apply to the Faculty of Graduate and Postdoctoral Studies for permission to register in a maximum of <b>three</b> courses, or <b>9</b> credits, at the 500-level. Students must receive the permission of the course instructor, Arts Academic Advising, and the Faculty of Graduate and Postdoctoral Studies. Normally such permission will be given only to students who have completed 75% of their 300- and 400-level requirements (no fewer than 36 credits at the upper-level) with a minimum overall average of 76%.	Repeating a Course for Higher Standing ...
Change of Registration ...	Repeating Failed Courses
Repeating a Course for Higher Standing ...	Students may repeat a failed course only once. This restriction does not apply to <del>courses required to satisfy the Bachelor of Fine Arts Language Requirement, to</del> PSYC 217 and 218, or to MATH 100, 101, 102, 103, 104, 105, 110, 180 and 184, any of which may be repeated twice.
Repeating Failed Courses	<b>Type of Action:</b> Update wording regarding registration and course selection to reflect current practice in BFA programs, and the proposed provision for direct entry.
Students may repeat a failed course only once. This restriction does not apply to PSYC 217 and 218, or to MATH 100, 101, 102, 103, 104, 105, 110, 180 and 184, any of which may be repeated twice.	<b>Rationale for Proposed Change:</b> <i>Note: This proposal is linked to the category 1 BFA Admission and Transfer proposal but does not take effect until the 2017W session.</i>





	<p>Direct entry is a vital change that will support the unique nature of the BFA options, and page should match actual practice in the BFA programs. The BFA degree programs seek to provide for direct entry from secondary school. This change would improve recruitment and retention, as well as normalizing these degrees, which are distinct degree programs like the Bachelor of Music (BMus), the Bachelor of International Economics BIE), and the Bachelor of Media Studies (BMS). UBC-O already provides for direct entry into their BFA programs. With the proposed direct-entry structure, students could still enter the BFA programs in second or third year and current transfer arrangements from other post-secondary institutions would be unaffected.</p>
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### **Anthropology Department**

<b>Category: (1) Faculty: Arts</b> <b>Department: Anthropology</b> <b>Faculty Approval Date: 2016 Oct 20</b> <b>Effective Session (W or S): S</b> <b>Effective Academic Year: 2017</b>	<b>Date: April 22, 2015</b> <b>Faculty Contact: Lois</b> <b>Nightingale, <a href="mailto:Arts.Curriculum@ubc.ca">Arts.Curriculum@ubc.ca</a>;</b> <b>Dept. Contact: Andrew Martindale,</b> <b><a href="mailto:Andrew.martindale@ubc.ca">Andrew.martindale@ubc.ca</a>;</b>
<b>Proposed Calendar Entry:</b>  ANTH 435 (3) The Japanese Tea Ceremony: Ethnography of Performance, Practice, and Ritual  An exploration of <i>Chanoyu</i> , Japanese Tea Practice, as a culturally embedded ritual, performance, and aesthetic form, and as a way of understanding underlying elements of Japanese culture. This course has a studio component and a nominal fee may be charged.	<b>Present Calendar Entry:</b> n/a  <b>Type of Action: new course</b> Create new course.  <b>Rationale for Proposed Change:</b>  The proposed course has been taught for several years under a generic code and the department wishes to create a dedicated course entry in the calendar. Courses in ethnography are required as part of Anthropology Major and Minor programs and subjects focusing on Japan attract wide student interest. ANTH 435 is designed for students interested in detailed analysis of ethnographic data in the context of global themes.



### **Asian Studies Department**

<b>Category:</b> (1) Faculty: <b>Arts</b> <b>Department:</b> Asian Studies <b>Faculty Approval Date:</b> 2016 Oct 20 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> September 27, 2016  <b>Contact Person:</b> Lyndsay Bocchinfuso <b>Phone:</b> 2-9266 <b>Email:</b> <a href="mailto:lyndsay.bocchinfuso@ubc.ca">lyndsay.bocchinfuso@ubc.ca</a>
<b>Proposed Calendar Entry:</b>  ASIA 333 (3) Contemporary South Asian Gender and Sexuality Studies  Main theories and key concepts with a particular focus on the changing status of women, and gender and sexual minorities.	<b>Present Calendar Entry:</b>  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> The Department of Asian Studies offers a number of courses that focus on the histories of Asian societies; on sex and gender in Asian cultures, religions and literatures; and on intercultural exchange in Asia. However, there is no course at present that introduces students to the field of South Asian women's, gender and sexuality studies. Moreover, while the course's focus is on South Asia, its centering of intersectionality as a theoretical and methodological approach makes it relevant to the study of women and gender/sexual minorities in other Asian societies, including China, Japan, Taiwan and Korea. The course thus complements a number of existing courses, including ASIA 254 (Sex, Gender, and Sexuality in Japanese Literature and Film) and ASIA 211 (Sex, Sexual Ethics and Asian Religions) and makes a larger contribution to the Department of Asian Studies as a whole. Given its interdisciplinary nature and focus on women and minorities, the course will be of interest to students in Sociology, Anthropology, Law, Political Science, Asian Canadian and Asian Migration Studies and the Institute for Gender, Race, Sexuality and Social Justice.
<b>Category: 1</b> Faculty: <b>Arts</b> <b>Department:</b> Asian Studies <b>Faculty Approval Date:</b>	<b>Date:</b> June 1, 2016 <b>Dept Contact:</b> Lyndsay Bocchinfuso <b>Email:</b> <a href="mailto:lyndsay.bocchinfuso@ubc.ca">lyndsay.bocchinfuso@ubc.ca</a>



<b>Effective Session (W or S): S</b> <b>Effective Academic Year: 2017</b>	<b>Faculty Contact:</b> Lois Nightingale Email: <a href="mailto:Arts.Curriculum@ubc.ca">Arts.Curriculum@ubc.ca</a>
<b>Proposed Calendar Entry:</b>  PUNJ 403 (3) Modern Punjabi Literature  Popular and literary works in modern Punjabi, with a focus on short stories and poetry. Emphasis on reading, writing, and vocabulary development.  <i>Pre-requisite:</i> PUNJ 300	<b>Present Calendar Entry:</b>  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> The UBC Punjabi language program has been progressively developing a full set of advanced courses at the fourth-year level. PUNJ 403 will complete the planned set of courses offering a chronological overview of Punjabi literature: we currently have PUNJ 401 on devotional Punjabi, and PUNJ 402 on early modern Punjabi narrative traditions; we are also proposing to change PUNJ 400, on the novel, to a three-credit course to parallel these other courses. PUNJ 403 will be the first advanced language class focused on modern Punjabi literature, which will be of immediate interest to students. A few literary texts are introduced in PUNJ 300, but students at that level are still gaining basic reading ability. PUNJ 403 will involve advanced engagement with modern Punjabi literature, while further developing students' linguistic skills.  This Cat 1 is linked to a Cat 2 that is coming through from the Dean's Office to add this course to the BA DegreeRequirements> LiteratureRequirements



### **Creative Writing Program**

<b>Category: (1)</b> Faculty: <b>Arts</b> <b>Department:</b> CRWR <b>Faculty Approval Date:</b> 2016 Oct 20 <b>Effective Session (S):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> Nov 27, 2015 (online) <b>Contact Person:</b> Kari Lund-Teigen (on behalf of Linda Svendsen) <b>Phone:</b> 604-827-2331 <b>Email:</b> kari.lund-teigen@ubc.ca
<b>Proposed Calendar Entry:</b>  CRWR 302 (3) Writing for Podcast Exploration of and practice in writing for podcast. <i>Prerequisite:</i> CRWR 213	<b>Present Calendar Entry:</b> NA  <b>Type of Action:</b> New Course.  <b>Rationale for Proposed Change:</b> Through a mix of discussion, in-class creative work, lecture, writing, listening to podcasts, and actual podcast generation, this course equips students with a nuanced understanding of the practical and creative parameters of podcasting, its related social impacts, and the potential it holds for writers.  Along the way, students will improve the clarity and impact of their writing, and learn to understand the relationship of platform to audience. By the end of this course, students will have gained a sense of the vast potential of this creative auditory medium, and learned to tailor their writing to make the most of it.  This class will follow on the foundations students have built in CRWR 213: Intro to Writing for New Media, deepening both their knowledge of the podcasting platform and their ability to tailor their ideas and writing for it. CRWR 302 will be a much-needed upper-level progression that will support students pursuing a Minor in Creative Writing as well as the Bachelor of Media Studies program. Demand for courses that address the creation of content in new media is high (as shown by the number of students enrolled in CRWR 213.)



### **French, Hispanic and Italian Studies Department**

Category: (1) Faculty: Arts Department: FHIS Faculty Approval Date: 2016 Oct 20 Effective Session (W or S): S Effective Academic Year: 2017	Date: Sep. 26, 2016 Fac. Contact: <a href="mailto:Lois.Nightingale@ubc.ca">Lois.Nightingale@ubc.ca</a> Contact Person: Christine Rouget Phone: 2-0048
<b>Proposed Calendar Entry:</b>  SPAN 498 (3-6) c Directed Reading Focus on a topic agreed on by both Faculty Supervisor and student. Restricted to students with 4 <sup>th</sup> year standing and permission from both the Department Head and Faculty Supervisor.	<b>Present Calendar Entry:</b>  <b>Type of Action:</b> Create a new course  <b>Rationale for Proposed Change:</b> The Spanish program requests a directed reading course (as we have within the Major in French) to accommodate students specializing in Spanish. The number of upper level Spanish courses is limited and not every course is offered each year. A Directed Reading course allows the Department flexibility to provide our upper level students an opportunity to continue to move through their degree in a timely manner and to study areas outside what is presently offered.



### **Sociology Department**

<b>Category: 1</b> Faculty: <b>ARTS</b> <b>Department:</b> Sociology <b>Faculty Approval Date:</b> 2016 Oct 20 <b>Effective Session (W):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> Sep 27, 2016 <b>Fac Contact:</b> <a href="mailto:Lois.Nightingale@ubc.ca">Lois.Nightingale@ubc.ca</a> <b>Dep Contact:</b> <a href="mailto:Gerry.Veenstra@ubc.ca">Gerry.Veenstra@ubc.ca</a> <b>Phone:</b> 2-0048
<b>Proposed Calendar Entry:</b>  SOC1 387 (3) Drugs and Society Social dimensions of the causes, consequences, regulation, and treatment of substance abuse and addiction from Canadian and international perspectives. <i>Prerequisite:</i> One of SOC1 100, SOC1 101, SOC1 102.	<b>Type of Action:</b> New course.  <b>Rationale for Proposed Change:</b> UBC Sociology does not currently offer a course dealing with drug use and addiction related issues, despite there being considerable public and academic attention paid to this issue and a large body of sociological research conducted in this area. This course will provide a balanced examination of drug use from multiple sociological perspectives and in a variety of historical and contemporary contexts.



### **ACAM: Asian Canadian Asian Migration**

<b>Category: (1) Faculty: Arts</b> <b>Department: Asian Canadian and Asian Migration Studies</b> <b>Faculty Approval Date: 2016 Nov 29</b> <b>Effective Session (W or S): S</b> <b>Effective Academic Year: 2017</b>	<b>Date: November 29, 2016</b> <b>Contact Person: Lois Nightingale</b> <b>Phone: 2-0048</b> <b>Email: <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a></b>
<b>Proposed Calendar Entry:</b>  ACAM 300 (3) Dis/Orienting Asian Canada  The histories, cultures, social dynamics, and life experiences of Asian communities in Canada in the context of global migrations. Restricted to students with second year status or higher.	<b>Present Calendar Entry: N/A</b>  <b>Type of Action: Create new course</b>  <b>Rationale for Proposed Change:</b> To create a survey course that provides an overview of the histories of Asian migration to Canada as well as the cultures and life experiences of Asian communities in Canada. The course will cover foundational texts and critical concepts in Asian Canadian and Asian Migration studies, as well as the ethics of community-based knowledge and research, to equip students with the knowledge and skills necessary for more advanced inquiry in the field.

### **AHVA: Art History**

<b>Category: (1) Faculty: Arts</b> <b>Department: AHVA</b> <b>Faculty Approval Date: 2016 Nov 29</b> <b>Effective Session (W): S</b> <b>Effective Academic Year: 2017</b>	<b>Date: November 10, 2016</b> <b>Contact Person: Deana Holmes</b> <b>Phone: 604-822-1282</b> <b>Email: <a href="mailto:deana.holmes@ubc.ca">deana.holmes@ubc.ca</a></b>
<b>Proposed Entry:</b>  VISA 101 (3) BFA Studio Practice  Introduction to a broad range of contemporary studio practice. Intended for 1st year Bachelor of Fine Arts VISA students.	<b>Present Entry:</b> None.  <b>Type of Action:</b> New Course  <b>Rationale:</b> With the introduction of a direct entry BFA Visual Art program (year 1), this course will introduce the cohort to the VISA faculty, their peers, and the Department's





	pedagogical approach to contemporary art.
<b>Category: (1) Faculty:</b> Arts <b>Department:</b> AHVA <b>Faculty Approval Date:</b> 2016 Nov 29 <b>Effective Session (W):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> November 29, 2016 <b>Contact Person:</b> Lois Nightingale <b>Phone:</b> 2-0048 <b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a>
<b>Proposed Calendar Entry:</b>  VISA 280 (3) Contemporary Art: Ideas as Practice II  Development and history of contemporary art practice, with a focus on how artists realize and exchange ideas. Intended for 2 <sup>nd</sup> year BFA VISA students. Prerequisite: At least 72% in VISA 183	<b>Present Calendar Entry:</b>  NA  <b>Type of Action:</b> New course to reflect new 2 <sup>nd</sup> year Studio Theory course to the BFA.  <b>Rationale for Proposed Change:</b> Upon analyzing curriculum in tandem with the creation of degree outcomes, it was observed that theoretical discussions initiated in the foundation year were not taken up again until third year. This new course, VISA 280, will fill in the gap and result in cohesive flow of the concepts throughout the degree curriculum.
<b>Category: (1) Faculty:</b> Arts <b>Department:</b> AHVA <b>Faculty Approval Date:</b> 2016 Nov 29 <b>Effective Session (W):</b> 2017 <b>Effective Academic Year:</b> S	<b>Date:</b> November 29, 2016 <b>Contact Person:</b> Lois Nightingale <b>Phone:</b> 2-0048 <b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a>
ARTH 358 (3) <b>Chinese Art for the Afterlife</b> Close analyses of Chinese tomb objects and tombs as spatial constructs in their historical, ritual, and social context.	ARTH 358 (3) <del>The Making of Early China: From Archaeology to History</del>  Close <del>reading of visual and textual materials will elucidate Chinese art and culture prior to 300 CE, as well as question the objectivity of historical reconstructions.</del>  <b>Type of Action:</b> Revise course title and description to update language and improve relevance.  <b>Rationale for Proposed Change:</b> <i>Use of ARTH 358: This course code was</i>



	<p><i>last entered on 50 student transcripts in 11W. The program wishes to re-use the number for the 2017W session.</i></p> <p>It has been many years since this course was first drafted and our Department now considers the explicit timeline outdated and ineffective for describing archaeological materials.</p> <p>ARTH 358 uses materials that were taught in its previous iteration, but now focuses on tombs and expands the temporal framework to reflect newly excavated materials and recent scholarship. For this reason we have submitted it as a Cat 1 proposal.</p> <p>The Art History Dept sent these two course proposals out as a single package, with consultations done as a two course package. For this reasons we have kept them together in the report.</p>
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### **ASIA: Asian Studies**

<p><b>Category: (1)</b> Faculty: Arts  <b>Department:</b> Asian Studies  <b>Faculty Approval Date:</b> 2016 Nov 29  <b>Effective Session (W or S):</b> S  <b>Effective Academic Year:</b> 2017</p>	<p><b>Date:</b> November 29, 2016  <b>Contact Person:</b> Lois Nightingale  <b>Phone:</b> 2-0048  <b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p>ASIA 311 (3) Tibetan Buddhism</p> <p>Religious terrain of the Tibetan cultural realm, looking at the history and development of Tibetan Buddhism and key ideas of the four main Tibetan Buddhist traditions.</p>	<p><b>URL:</b></p> <p><b>Present Calendar Entry:</b></p> <p><b>Type of Action:</b> New course</p> <p><b>Rationale for Proposed Change:</b> The Department of Asian Studies does not currently offer this kind of course and we are creating it to fulfill demand. The Department will also be receiving funding from the Sheng Yen Foundation Postdoctoral Fellowship in East Asian Buddhism over the next several years that would be involved in the sponsorship of a</p>



	Postdoctoral student for the teaching of new courses on Buddhism. This is one of those courses.
<b>Category: (1) Faculty:</b> Arts <b>Department:</b> Asian Studies <b>Faculty Approval Date:</b> 2016 Nov 29 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> November 29, 2016 <b>Contact Person:</b> Lois Nightingale <b>Phone:</b> 2-0048 <b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a>
<b>Proposed Calendar Entry:</b>  ASIA 313 (3) Tibetan and Himalayan Culture and Society  History and culture of the Himalayan regions, including India, China, Tibet, Nepal and Bhutan.	<b>Present Calendar Entry:</b>  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> Much like other ASIA courses that focus on a particular region in Asia and its respective culture, society, religion, and language(s) (ex. ASIA 300: Writing and Culture in East Asia), this course would allow the Department to offer students the ability to take a regionally-focused course on an Asian region that is currently not covered in-depth in any other ASIA course at present. The Department currently has courses that focus on specific regions such as Japan, Korea, and China, but does not cover content in-depth from the Tibetan and Himalayan region. Furthermore, as the Department will soon be offering several new courses centered around Buddhism by specific Asian region, and in particular, two courses that focus on Buddhism and its roots in the Himalayan region (ex. ASIA 306: Esoteric Buddhism and ASIA 311: Tibetan Buddhism), ASIA 313 could be taken before, after, or in tandem with ASIA 311 or ASIA 306 to build on the student's knowledge of the region.

**CRWR: Creative Writing**

<b>Category: (1) Faculty:</b> Arts <b>Department:</b> CRWR <b>Faculty Approval Date:</b> 2016 Nov 29 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> November 29, 2016 <b>Contact Person:</b> Lois Nightingale <b>Phone:</b> 2-0048 <b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a>
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<p><b>Proposed Calendar Entry:</b></p> <p>CRWR 310 (3) Video Game Writing and Narrative</p> <p>Narrative design and writing for video games.</p> <p><i>Prerequisite:</i> CRWR 200</p>	<p><b>Present Calendar Entry:</b> n/a</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale for Proposed Change:</b> A robust demand exists for this genre of Creative Writing at the undergraduate level, in which enrolments have significantly grown over the past 6 years. CRWR 310 will also serve as a much-needed upper-level progression supporting students pursuing a Minor in Creative Writing as well as the Bachelor of Media Studies program. Demand for courses that address the creation of content in new media is high (as shown by the number of students enrolled in CRWR 213). This course serves undergraduates preparing to pursue a Masters degree in Digital Media or who seek entry into the video game industry.</p>
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### **ECON: Vancouver School of Economics**

<p><b>Category: (1) Faculty:</b> Arts</p> <p><b>Department:</b> Vanc. School of Economics</p> <p><b>Faculty Approval Date:</b> 2016 Nov 29</p> <p><b>Effective Session (W or S):</b> S</p> <p><b>Effective Academic Year:</b> 2017</p>	<p><b>Date:</b> November 29, 2016</p> <p><b>Contact Person:</b> Lois Nightingale</p> <p><b>Phone:</b> 2-0048</p> <p><b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p>ECON 485 (3) Political Economy</p> <p>State and politics in economics. How states emerge, how dictators stay in power. Why groups engage in costly conflict, how countries turn into democracies and what its benefits are.</p> <p><i>Prerequisites:</i> One of ECON 301, ECON 304, ECON 308; and, one of ECON 302, ECON 305, ECON 309; and ECON 325; and ECON 326.</p>	<p><b>Present Calendar Entry:</b></p> <p><b>Type of Action:</b> New Course</p> <p><b>Rationale for Proposed Change:</b> In a standard economics courses the state is usually absent by assumption. Subjects trade peacefully, there is no violence. In reality the situation is different. The state's ability to hold a monopoly of violence and promote peace is crucial for economic activity. Political Economy is a growing field in economics and while several PhD programs now teach political economy courses, there are very few undergraduate</p>



	<p>classes. This course is designed for undergraduates to get a broad overview over the main issues in political economy. The course covers both standard theoretical work-horse models and empirical studies.</p> <p>One of our existing courses, ECON234 Wealth and Poverty of Nations, incorporates a number of political economy issues. Many students of this course have expressed an interest in taking a more advanced political economy course. In addition, the VSE is developing a strong academic presence in the field of Political Economy, making a political economy course at the undergraduate level an important contribution to student learning.</p>
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### **FHIS: French, Hispanic and Italian Studies**

<p><b>Category: (1) Faculty:</b> Arts  <b>Department:</b> French, Hispanic and Italian Studies  <b>Faculty Approval Date:</b> 2016 Nov 29  <b>Effective Session</b> 2017 S</p>	<p><b>Date:</b> November 29, 2016  <b>Contact Person:</b> Lois Nightingale  <b>Phone:</b> 2-0048  <b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p>FREN 346 (3) French at Work  Communicative French for students preparing for a career in the francophone world. Not available for credit toward a Minor, Major or Honours degree in French.  Language of instruction: French  <i>Pre-requisite:</i> FREN 123</p>	<p><b>Present Calendar Entry:</b></p> <p><b>Type of Action:</b>  Create a New Course</p> <p><b>Rationale:</b></p> <p>Since French is one of the official languages of Canada and much of Canada's international trade with other francophone countries is carried on through Quebec, which itself contributes almost a fifth of the country's gross domestic product, French-speaking Canadians do have some advantage in the pursuit of careers in business.</p> <p>Moreover, familiarity with the culture and way of life of distinct societies, even within a single country, nourishes that level of understanding and trust that is as important in business relationships as it is in</p>



	<p>personal or political interaction.</p> <p>FREN 346 will be of value to undergraduate students preparing through the study of Commerce, Economics or International Relations, through Co-Op placements or in other ways for careers in the domestic economy of a Canada whose multilingual and multicultural society is, in significant measure, francophone, or in other French-speaking countries</p> <p>It will contribute directly to the required language training of students in Inter-national Relations, in International Business or in Global Resource Systems. And it will help all students, in whatever field of studies, to develop language skills that will serve them well in any French-speaking business setting.</p>
<p><b>Category: (1) Faculty:</b> Arts  <b>Department:</b> FHIS  <b>Faculty Approval Date:</b> 2016 Nov 29  Effective Session (W or S): S  Effective Academic Year: 2017</p>	<p><b>Date:</b> November 29, 2016  <b>Contact Person:</b> Lois Nightingale  <b>Phone:</b> 2-0048  <b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p>ITAL 325 (3) Italian Translation  A task-based introduction to the theory and practice of translation as applied to Italian and English texts : word choice, semantic correspondence, cultural adaptation, communicative purpose, target readerships. Languages of Instruction: English and Italian  <i>Prerequisite:</i> ITAL 202</p>	<p><b>Present Calendar Entry:</b></p> <p><b>Type of Action:</b>  Create a new course</p> <p><b>Rationale for Proposed Change:</b>  This third-year level course is aimed at retaining students who would normally stop taking language courses after two years of Italian language instruction and who are interested in an introductory course on translation theory and technique. As made clear by numerous requests from students in and outside the Faculty of Arts, there is a demand for interdisciplinary and applied skills courses within the domain of language instruction. This course is a first step in meeting such expectations within Italian Studies and aligns itself with similar courses already existing in the English-French and English-Spanish combination at</p>



	the Department of FHIS as well as in the English-German combination at the Department of CENES.
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### **FNEL: First Nations and Endangered Languages**

<p><b>Category:</b> (1) Faculty: Arts</p> <p><b>Department:</b> First Nations and Endangered Languages Program (FNEL)</p> <p><b>Faculty Approval Date:</b> 2016 Nov 29</p> <p><b>Effective Session (W or S):</b> S</p> <p><b>Effective Academic Year:</b> 2017</p>	<p><b>Date:</b> November 29, 2016</p> <p><b>Contact Person:</b> Lois Nightingale</p> <p><b>Phone:</b> 2-0048</p> <p><b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p>FNEL 483 (3) Indigenous Languages of BC: Diversity and Vitality</p> <p>Genetic affiliation, areal contact, typological diversity, and initiatives to sustain the vitality and diversity of BC First Nations Languages.</p> <p><i>Prerequisite or Restrictions:</i> none</p>	<p><b>Type of Action:</b> New course</p> <p><b>Rationale:</b></p> <p>This course adds a 400-level course to the FNEL offerings available to our Major and Minor students, as well as to other students across the UBC campus. Working within a context of respectful protocols for collaboration with First Nations communities, FNEL 483 is designed to introduce students to the uniquely rich spectrum of linguistic diversity in the Pacific Northwest region of British Columbia and neighbouring areas; provide an appreciation and understanding of the special features of the Indigenous languages spoken in this area; and provide a window onto the importance of maintaining this diversity of Aboriginal languages and cultures for the present and future of originating communities and Canadian society at large.</p> <p>Given UBC's commitment to indigenizing the curriculum and the local and global importance of the potential loss of diversity, identity, and traditional knowledge entailed by the fragility of Indigenous languages. (<i>cf. UBC Aboriginal Strategic Plan 2008 §5.4</i>), FNEL 483 will serve students across the university in different programs and academic streams.</p> <p>A nuanced understanding of First Nations</p>



	<p>issues lies at the core of UBC's commitment to Aboriginal and indigenous issues. This vision is clearly articulated in the University's 2008 Aboriginal Strategic Plan.</p> <p>Section 5.4 of the Aboriginal Strategic Plan relating to Research strategy notes that 'The stabilization, documentation, and recovery of Aboriginal languages are often cited as among the most important priorities for communities. UBC should continue to develop its contributions in this area in both research and instruction, wherever possible.'</p> <p>Section 7.1 of the Aboriginal Strategic Plan, on Community Relations, highlights the critical fact that 'UBC must continue to develop and support its relationships with the Musqueam Indian Band and ... develop new programs.'</p> <p>The Truth and Reconciliation Commission Calls to Action released in 2015 speak powerfully to the centrality of culture and language for reconciliation and healing (Points 13-17). In particular, Point 16 notes: "We call upon post-secondary institutions to create university and college degree and diploma programs in Aboriginal languages."</p> <p>An enriched set of course offerings in First Nations and Endangered Languages, and a dedicated course on the Diversity and Vitality of BC Languages in particular, offer a tangible implementation of these action points, and reflects a growing student interest in our program and deepening relations with our community partners at Musqueam and the region.</p>
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### **LING: Linguistics**

<b>Category: 1 Faculty:</b> Arts <b>Department:</b> Linguistics <b>Faculty Approval Date:</b> 2016 Nov 29 <b>Effective Session (W or S):</b> S	<b>Date:</b> November 29, 2016 <b>Contact Person:</b> Lois Nightingale <b>Phone:</b> 2-0048 <b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a>
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<b>Effective Academic Year:</b> 2017	
<p><b>Proposed Calendar Entry:</b> LING 170 (3) Introduction to How to Learn a Language</p> <p>Skills and strategies for second language acquisition, through the foundations of pronunciation, vocabulary, grammar, and pragmatics, connected to the practical, social, and personal challenges of language learning.</p> <p>LING 270 (3) Introduction to Studies in Second Language Acquisition</p> <p>Linguistic systems that learners of an additional language develop as they approximate towards the target language, and key questions about what this 'interlanguage' system reveals about how we learn languages.</p> <p><i>Prerequisites:</i> One of LING 100, 101, 140, 170</p>	<p><b>Present Calendar Entry:</b> New Course.</p> <p><b>Type of Action:</b> LING 170 is a new course.</p> <p><b>Present Calendar Entry:</b> New Course.</p> <p><b>Type of Action:</b> LING 270 is a new course.</p> <p><b>Rationale for Proposed New Courses:</b> Both LING 170 and LING 270 will incorporate theoretical, methodological and pedagogical aspects of second language acquisition into the Linguistics curriculum. These courses cover a core area of the field of linguistics and fill a major gap in UBC's offerings compared to peer institutions. They are designed to support students interested in pursuing study in language learning and teaching, and we anticipate they will feed students into the many Arts undergraduate and graduate language programs as well as into graduate-level language education programs.</p>

**PSYC: Psychology Department**

<p><b>Category: (1) Faculty:</b> Arts</p> <p><b>Department:</b> Psychology</p> <p><b>Faculty Approval Date:</b> 2016 Nov 29</p>	<p><b>Date:</b> November 29, 2016</p> <p><b>Contact Person:</b> Lois Nightingale</p> <p><b>Phone:</b> 2-0048</p>
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<b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2017	<b>Email:</b> <a href="mailto:lois.nightingale@ubc.ca">lois.nightingale@ubc.ca</a>
<p><b>Proposed Calendar Entry:</b></p> <p>PSYC 216 (3) Questioning Psychological Science in the Media</p> <p>Use basic principles of quantitative psychological research methods to critique psychological claims presented in the media and to translate psychological science to everyday life.</p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/Vancouver/courses.cfm?page=name&amp;code=PSYC">http://www.calendar.ubc.ca/Vancouver/courses.cfm?page=name&amp;code=PSYC</a></p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> New Course</p> <p><b>Rationale for Proposed Change:</b>  Thousands of students from across campus take psychology courses each year. Curriculum renewal efforts revealed that the current prerequisites for most of our 300-level courses (i.e., PSYC 101 and 102, or PSYC 100) were not sufficiently preparing the many non-majors who take them to engage with our discipline at that level. This course was developed for non-major students to improve their understanding of psychology research methods more deeply than what is possible in introductory survey courses (i.e., PSYC 101 and 102). We embedded this research methods training in the context of media to help students become better consumers of our discipline in their everyday lives, and to make the topic interesting and meaningful.</p> <p>PSYC 216 is intended as a non-majors alternative to PSYC 217. PSYC 217 Research Methods is our standard methods training, restricted to Psychology majors (as well as Cognitive Systems and Speech Sciences) because it is budget-intensive and designed for creators, rather than consumers, of psychological research.</p> <p>We are piloting PSYC 216 in January 2017 as a version of our contemporary topics course (PSYC 205), and intend to offer PSYC 216 broadly in 2017/2018. For 2018/2019, we are considering changing the prerequisites for 300-level PSYC courses to include <i>either</i> PSYC 101 or 102,</p>



	and <i>either</i> PSYC 216 or PSYC 217 Research Methods. The reason for delaying changes to 300-level prerequisites is to conduct a full feasibility analysis and attempt to avoid a registration bottleneck for students.
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty: Commerce</b> <b>Faculty Approval Date: Dec 8, 2016</b> <b>Effective Session: 2017W1</b> <b>Year: 2017</b>	<b>Date: December 2, 2016</b> <b>Contact Person: Kin Lo</b> <b>Phone: 604-822-8430</b> <b>Email: kin.lo@sauder.ubc.ca</b>
<b>Proposed Calendar Entry:</b>  <b>COMM 483 (6) Leadership and General Management</b> Integration and application of business knowledge to make business decisions across disciplines; development of personal leadership ability and style. Case-based with guest speakers.  <i>This course is not eligible for Credit/D/Fail grading.</i>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=COMM">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=COMM</a>  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> Assigning a permanent course number after running as a pilot (COMM 486R) for several years.  <input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading.</b>  <b>Rationale for not being available for CR/D/F:</b> This course is open only to students in the Bachelor of Commerce program.
<b>Proposed Calendar Entry:</b>  <b>COMM 484 (3) Sustainability Marketing</b> Role of marketing in creating social value. Integration of marketing fundamentals with core social, environmental, and economic principles of sustainability. Analysis of current sustainability trends. Development of strategic and practical marketing recommendations for for-profit enterprises. Potential and pitfalls of sustainability marketing.  <i>This course is not eligible for Credit/D/Fail grading.</i>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=COMM">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=COMM</a>  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This is a new course that meets requirements in the Marketing Option and the Sustainability concentration in the BCom program. This course has been previously offered as a pilot (COMM 486F).  <input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading.</b>  <b>Rationale for not being available for CR/D/F:</b> This course is open only to students in the Bachelor of Commerce program.

<p><b>Proposed Calendar Entry:</b></p> <p><b>COMM 485 (3) Social Entrepreneurship</b></p> <p>An applied course that examines the innovative, growing, and rapidly evolving field of social entrepreneurship, which tackles social and environmental challenges through business perspectives and methods.</p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=COMM">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=COMM</a></p> <p><b>Present Calendar Entry:</b></p> <p><b>Type of Action:</b>  New course</p> <p><b>Rationale for Proposed Change:</b>  Assigning a permanent course number after running as a pilot (COMM 386E) for two years.</p> <p>Note: The course was original intended as a 400-level course, but was piloted using the 386 number due to a shortage of 486 codes used for pilot courses.</p> <p><input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading.</b></p> <p><b>Rationale for not being available for CR/D/F:</b>  This course is open only to students in the Bachelor of Commerce program.</p>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<b>Faculty:</b> Forestry <b>Department:</b> Forest Science and Conservation <b>Faculty Approval Date:</b> Nov 8, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> 10/25/2016 <b>Contact Person:</b> Scott Hinch <b>Phone:</b> 604-822-9377 <b>Email:</b> scott.hinch@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>CONS 452 (12) Global Perspectives Capstone</b> Examination of global resources and sustainability via scenario evaluation, modelling, and prescription. [3-0-9] <i>Prerequisite:</i> One of CONS 340, GEOB 270 and fourth year standing in the Global Perspectives Major. <i>Corequisite:</i> FRST 443.	<b>URL: CONS-452</b>  <b>Present Calendar Entry:</b> <b>CONS 452 (6) Global Perspectives Capstone</b> Examination of global resources and sustainability via scenario evaluation, modelling, and prescription. [3-0-3] <i>Prerequisite:</i> One of CONS 340, GEOB 270 and fourth year standing in the Global Perspectives Major. <i>Corequisite:</i> FRST 443.  <b>Type of Action:</b> Change Course Credit Numbers  <b>Rationale for Proposed Change:</b> See supporting document  <b>X      Not available for Cr/D/F grading</b> (undergraduate courses only)  <b>Rationale for not being available for Cr/D/F:</b>  This course is the capstone course for students in the BSCN Global Perspectives Major – only students in this major and in their 4 <sup>th</sup> year once they have completed the international experience are allowed to take it. It is a required course and as such cannot be taken as a Cr/D/F course.

**Rationale for Credit Increase for CONS-452:**

- The request to create a 12 credit course for Cons452 is based on several factors which will benefit the student experience, improve course content, and enhance the Global Perspectives Program overall. Most importantly, the additional time will allow us to expand trans-disciplinary course content related to carbon accounting, forest-agriculture linkages, and energy poverty (see Syllabus and Overview of Course Assignments) and thus fully integrate the expertise of 2 additional instructors (Rhemtulla and Zerriffi). In prior years, it has become apparent that a 6 credit course does not allow for the depth and time necessary for such content, nor did a 6 credit course account for what was, arguably, a 9 credit workload. Time for integrative synthesis projects (see Synthesis Packet) as well as class discussion was far too limited (as noted by instructors as well as students). Our new course will double the hours of scheduled time for classroom interaction, incorporate new lab material and allow for an additional week focused solely on Synthesis Projects (without losses to other course content).

From a course content perspective, these changes will:

- Create space for additional course content, taught in more depth
- Create space for additional interactive discussion sections on assigned readings (Thursdays)
- Enable better coordination among students for their numerous group projects
- Enable incorporation of professional development, resume, and job hunting skills

From a programmatic perspective, several secondary benefits will accrue. The new course credit load will:

- Better reflect the expected workload and time commitment for students in the course (many weeks have 2 assignments due)
- Bring the GP Capstone course into better concordance with the other Capstone courses in the Faculty
- Enhance the final semester experience for students overall. As they focus solely on their capstone (with only one other concurrent course, FRST443), we expect this approach will enhance student learning. It will help prevent students over-committing themselves in their final semester (which impacts student progress, hinders scheduling team work and equal distribution of team tasks).

New content-related changes include (see Syllabus):

- Incorporation of statistics (learned from prior classes) into final projects, adapted appropriately to land cover change, carbon and energy poverty questions
- Incorporation of an additional textbook (*Resilience Practice*) with ample discussion time for conceptual mapping and brainstorming sessions.
- Experience acquiring, understanding and analyzing census data for asking social-ecological questions

- Deeper integration of global-level forest and agricultural mapping tools (e.g., EarthStat) to address this transdisciplinary factor driving international conservation and sustainable development problems.



## UBC Curriculum Proposal Form

### Change to Course or Program

#### Category: 1

<b>Faculty:</b> Applied Science <b>Department:</b> Biomedical Engineering Program <b>Faculty Approval Date:</b> Oct 27, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017/2018	<b>Date:</b> September 15, 2016 <b>Contact Person:</b> Rizhi Wang <b>Phone:</b> 2-9752 <b>Email:</b> rzwang@mail.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>BMEG 557 (1) Statistical Methods for Evaluating Medical Technologies</b>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BMEG">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BMEG</a>  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This course is currently in its first year under our “BMEG 591 - Topics in Biomedical Engineering” as a pilot course (BMEG 591S). This statistics course used to be part of BMEG 456/556 and was put into a pilot course this year.  <input type="checkbox"/> <b>Not available for Cr/D/F grading (undergraduate courses only)</b> (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)  <b>Rationale for not being available for Cr/D/F:</b> The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.  <input type="checkbox"/> <b>Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)

## Proposal Form

### Change to Course or Program

#### Category: 1

<b>Faculty:</b> Applied Science <b>Department:</b> ECE <b>Faculty Approval Date:</b> Oct 27, 2017 <b>Effective Session:</b> W <b>Effective Academic Year:</b> 2017	<b>Date :</b> September 2016 <b>Contact Person:</b> Nick Jaeger <b>Phone:</b> 2-5673 <b>Email:</b> nickj@ece.ubc.ca
<b>Proposed Calendar Entry:</b>  EECE 555 (3) Renewable and Efficient Electric Power Systems	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,195,272,39">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,195,272,39</a>  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This course is currently being offered as EECE 571C. The current proposal aims to include this course as a permanent offering in future years. The proposed course is to be added to the Master of Engineering Leadership in Urban Systems. The course can also be useful for graduate students in the power and energy systems area as well as those who are interested in renewable electric power systems.  The course material includes a comprehensive exposition of current pervasive renewable-based electricity generation technologies. Emphasis is placed on system-level problems, solutions, and advancements related to individual technologies as well as their role in the grid infrastructure. The course provides students an integrated perspective on planning issues broadly surrounding the integration of renewables, aimed at environmentally friendly energy production and consumption.  <b>X      Not available for Cr/D/F grading</b>  <b>Rationale for not being available for</b>

	<b>Cr/D/F:</b> N/A <input type="checkbox"/> <b>Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail</b> <b>grading</b>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<b>Faculty:</b> APSC <b>Department:</b> Mining Engineering <b>Faculty Approval Date:</b> Oct 27, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> September 17, 2016 <b>Contact Person:</b> Janusz Laskowski <b>Phone:</b> 604-822-4949 <b>Email:</b> jsl@apsc.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>MINE 521 (3) Advanced Flotation Technology</b>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=MINE">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=MINE</a>  <b>Present Calendar Entry:</b> n/a  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> This course replaces the current MINE590J course (Flotation Fundamentals and Applications). The course includes new chapters such as flotation of rare earth element ores, fluidized-bed flotation machines and flotation in seawater.  <input type="checkbox"/> <b>Not available for Cr/D/F grading</b> (undergraduate courses only)  <b>Rationale for not being available for Cr/D/F:</b>  <input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading

	<i>This proposal is linked to the proposed New Program, PhD in Cinema and Media Studies.</i>
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#### 4.4 Memo, Change to UBC Degree parchment (PhD)

<b>Category: (1) Faculty:</b> Arts Department: Theatre & Film Faculty Approval Date: 2016 Oct 20 <b>Effective Session: 2018 Winter</b>	<b>Date:</b> September, 2016 <b>Fac. Contact:</b> <a href="mailto:Lois.Nightingale@ubc.ca">Lois.Nightingale@ubc.ca</a>
<p> <b>To:</b> Senate Graduate Curriculum Committee  <b>From:</b> Associate Dean – Academic, Dr. Stefania Burk  <b>Date:</b> October 20, 2016         </p> <p>The following proposal was approved today at the meeting of the Faculty of Arts.</p> <p><b>RE: Change to UBC degree parchment for students in the Faculty of Graduate and Postdoctoral Studies, Doctor of Philosophy in Cinema and Media Studies</b></p> <p><b>Background and Rationale:</b>          The Faculty of Arts, is proposing.  <i>Therefore</i>, whereas Senate has allowed for a Faculty that wishes to change what appears on the parchment for an existing degree to make a proposal to the Senate Curriculum Committee for consideration and approval by Senate, <i>and whereas</i> Senate has allowed for “inclusion of information about the field of study” on the second line of the parchment (recommendation #8 of the report on Degree Names and Parchments, approved by Senate on October 15, 1997),</p> <p><b>PROPOSAL</b>          The Faculty of Arts respectfully requests approval to use two available lines on the parchment, as follows:</p> <ul style="list-style-type: none"> <li>• Line 1: “Doctor of Philosophy” (unchanged)</li> <li>• Line 2: “Cinema and Media Studies”</li> </ul>	

#### 4.4 Proposal, MA in Cinema and Media Studies

<b>Category: (1) Faculty:</b> Arts Department: Theatre & Film Faculty Approval Date: 2016 Oct 20 <b>Effective Session: 17 SUMMER</b>	<b>Date:</b> September, 2016 <b>Fac. Contact:</b> <a href="mailto:Lois.Nightingale@ubc.ca">Lois.Nightingale@ubc.ca</a>
<b>Proposed Calendar Entry:</b>  Master of Arts in <b>Cinema and Media Studies</b>	<b>Present Calendar Entry</b>  Master of Arts in <del>Film Studies</del>

	<p><b>Type of Action:</b></p> <ul style="list-style-type: none"> <li>Change the name of the existing Master of Arts specialization “Film Studies” to “Cinema and Media Studies”</li> </ul>
<p><a href="#">The Faculty of Graduate and Postdoctoral Studies &gt; Degree Programs &gt; Cinema and Media Studies</a></p> <p><b>Proposed Calendar Entry:</b></p> <p><b>&lt;b&gt;Cinema and Media Studies&lt;b&gt;</b></p> <p>Degree Offered: M.A.</p> <p>Members</p> <p>Professors</p> <p>E. Mathijs, B. McIlroy.</p> <p>Associate Professors</p> <p>L. Coulthard.</p> <p>Program Overview</p> <p><b>The Department of Theatre and Film offers a Master of Arts (M.A.) in Cinema and Media Studies. The program requires a thesis.</b></p> <p>The UBC Library and the Program’s Visual Resources Centre have extensive academic Cinema and Media studies and audiovisual holdings.</p> <p>Master of Arts <b>in Cinema and Media Studies</b></p> <p>Admission Requirements</p> <p>Students will be considered for acceptance into the program from any recognized degree in film studies, or who have at least 18 credits in filmstudies courses at the</p>	<p><b>URL:</b></p> <p><a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,1346">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,1346</a></p> <p><b>Present Calendar Entry:</b></p> <p><del>Film Studies</del></p> <p>Degree Offered: M.A</p> <p>Members</p> <p>Professors</p> <p>E. Mathijs, B. McIlroy.</p> <p>Associate Professors</p> <p>L. Coulthard.</p> <p>Program Overview</p> <p>The UBC Library and the Program’s Visual Resources Centre have extensive academic film studies and audiovisual holdings.</p> <p><del>Further information may be obtained from the Program. The Film Studies Program is part of the Department of Theatre and Film.</del></p> <p>Master of Arts</p> <p>Admission Requirements</p> <p>Students will be considered for acceptance into the program from any recognized degree in film studies, or who have at least 18 credits in film studies courses at the third- or fourth-year level with A standing in a degree with a major or honours in</p>

<p>third- or fourth-year level with A standing in a degree with a major or honours in another subject. <b>Applicants must meet the minimum admission requirements of the Faculty of Graduate and Postdoctoral Studies.</b> For specific application requirements, please visit the <a href="#">Program</a>.</p> <p>Contact Information:</p> <p><b>Cinema and Media Studies Graduate Program</b>          6354 Crescent Road          Vancouver, BC V6T 1Z2          Tel: 604.822.3880 x. 0          Fax: 604.822.5985          Web: <a href="http://www.theatrefilm.ubc.ca">www.theatrefilm.ubc.ca</a>  <b>Email: <a href="mailto:thtr.sec[at]ubc.ca">thtr.sec[at]ubc.ca</a></b></p>	<p>another subject. For specific application requirements, please visit the <a href="#">Program</a>.</p> <p>Contact Information:</p> <p><del>Film Studies</del> Program          6354 Crescent Road          Vancouver, BC V6T 1Z2          Tel: 604.822.3880 x. 0          Fax: 604.822.5985          Email: <del><a href="mailto:thtr.sec@ubc.ca">thtr.sec@ubc.ca</a></del>          Web: <a href="http://theatrefilm.ubc.ca">theatrefilm.ubc.ca</a>  <del>Karen Tong, Graduate Support, Theatre Studies and Film Studies</del></p> <p><b>Type of Action:</b>          Update the web page to incorporate the renamed MA program (From Film Studies to Cinema and Media Studies).</p> <p><b>Rationale:</b>          After careful deliberation, and review of naming standards within our industry, we propose to rename our Masters program from “Film Studies” to “Cinema and Media Studies”. This proposal arrives with our proposed PHD program in Cinema and Media Studies but we hope this proposal can move ahead immediately so we can begin to re-brand/market our MA. For this reason we have requested this proposal be approved for 2017 Summer while the proposed PhD is for 2017 Winter.</p> <p>We have chosen the term “Cinema and Media Studies” instead of “Film Studies” because we believe it is a more inclusive and accurate term to balance both the discipline’s history and recent technological developments. We still have cinemas around us; however, like video stores, they have been impacted negatively by the digital revolution. We now watch films and television programs on laptops, phones, ipads; the materiality of celluloid film has given way to digital film and</p>
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	<p>digital projection; digital platforms, such as Netflix dominate consumers' minds, and yet Imax screenings, 3-D, and the use of cinemas for digitally shot opera productions continue to be popular. Cinema here then refers to institutional history and use, while Media refers not just to television but to the new and developing web and screen based platforms. The largest scholarly association in the field of "film" study is now called "The Society of Cinema and Media Studies," with over 3,000 members world-wide, and thus the degree name would be consistent with the professional association with which we most identify. Such a designation would also assist graduates in their search for employment in colleges, universities, governmental agencies and cultural institutions.</p> <p>We accept that the "Media Studies" is defined differently across the University, and this proposal in no way seeks to preclude the use or future use of the term in other programs and Departments at the graduate level. Students currently in our Masters program regularly write theses on television drama, web series, Netflix streaming, and YouTube postings in addition to regular cinematic fare, and we are likely in the future to see the study of electronic games and Virtual Reality, so the name change provides more accurate nomenclature.</p>
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#### 4.5 Memo, change to UBC Degree parchment (MA)

<b>Category: (1) Faculty:</b> Arts Department: Theatre & Film Faculty Approval Date: 2016 Oct 20 <b>Effective Session: 17 SUMMER</b>	<b>Date:</b> September, 2016 <b>Fac. Contact:</b> <a href="mailto:Lois.Nightingale@ubc.ca">Lois.Nightingale@ubc.ca</a>
<b>To:</b> Senate Graduate Curriculum Committee <b>From:</b> Associate Dean – Academic, Dr. Stefania Burk <b>Date:</b> October 20, 2016	



The following proposal was approved today at the meeting of the Faculty of Arts.

**Change to UBC degree parchment for students in the Faculty of Graduate and Post Doctoral Studies, Master of Arts in Cinema and Media Studies**

**Background and Rationale:**

The Faculty of Arts is proposing renaming the existing MA in Film Studies to a MA in Cinema and Media Studies.

*Therefore*, whereas Senate has allowed for a Faculty that wishes to change what appears on the parchment for an existing degree to make a proposal to the Senate Curriculum Committee for consideration and approval by Senate, *and whereas* Senate has allowed for “inclusion of information about the field of study” on the second line of the parchment (recommendation #8 of the report on Degree Names and Parchments, approved by Senate on October 15, 1997),

**PROPOSAL**

The Faculty of Arts respectfully requests approval to use two of the available lines on the parchment, as follows:

- Line 1: “Master of Arts” (unchanged)
- Line 2: “Cinema and Media Studies”



<b>Category: (1) Faculty:</b> Arts <b>Department:</b> Asian Studies <b>Faculty Approval Date:</b> 2016 Oct 20 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> June 1, 2016 <b>Faculty Contact:</b> Lois Nightingale, <a href="mailto:Arts.Curriculum@ubc.ca">Arts.Curriculum@ubc.ca</a>
<b>Proposed Calendar Entry:</b>  ASIA 562 (3) Buddhism, Modernity, and the Nation-State in Asia  <i>This course is not eligible for Credit/D/Fail grading.</i>	<b>Present Calendar Entry:</b>  <b>Type of Action:</b> New course  <b>Rationale for Proposed Change:</b> Thematically, course content is pan-Asian, and deals with the issue of religion in public life. It has been taught under the IAR 515B number and approved for graduate methodological credit by the Department of Asian Studies. The proposed change will provide a permanent ASIA graduate course number, recognizing that the majority of students in past years have been Asian Studies graduates. Moving the course to ASIA makes it more visible to students in Asian Studies and those across campus interested in the graduate study of religion at UBC.



### **Department of English**

<b>Category: (1) Faculty:</b> Arts <b>Department:</b> English <b>Faculty Approval Date:</b> 2016 May 05 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> February 23, 2016 <b>Contact Person:</b> Lois Nightingale <b>Phone:</b> 2-0048 <b>Email:</b> <a href="mailto:arts.curriculum@ubc.ca">arts.curriculum@ubc.ca</a>
<b>Proposed Curriculum Changes:</b> <u>Create the following emphasis that can be applied to the Doctor of Philosophy in English program:</u>  Doctor of Philosophy in English, <b>emphasis in Science and Technology Studies</b>	<b>Type of Action:</b> <ul style="list-style-type: none"> <li>• Update the current Science and Technology research stream for the Ph.D. in English to an emphasis In Science and Technology Studies</li> <li>• Display this emphasis on a students' transcript. It will not be reflected on the parchment.</li> </ul>
<b>Proposed Curriculum Changes:</b> <u>Create the following emphasis that can be applied to the Master of Arts in English program:</u>  Master of Arts in English, <b>emphasis in Science and Technology Studies</b>	<b>Type of Action:</b> <ul style="list-style-type: none"> <li>• Create new Science and Technology Studies (STS) emphasis in the M.A. in English program</li> <li>• Display this emphasis on a students' transcript. It will not be reflected on the parchment.</li> </ul>
<a href="#">The Faculty of Graduate and Postdoctoral Studies</a> <a href="#">Degree Programs</a> English  <b>Proposed Calendar Entry:</b> "English" ... Program Overview ... Doctor of Philosophy ...	<b>URL:</b> <a href="http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,204,828,1157">http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,204,828,1157</a>  <b>Present Calendar Entry:</b> English ... Program Overview ... Doctor of Philosophy ... <del>Doctoral Research Stream in Science and Technology Studies (STS)</del> <del>The Science and Technology Studies (STS) research stream offers opportunities for advanced research and study of scientific work and thought from a variety of perspectives associated with the humanities and social sciences. It is a research stream within the Ph.D. degree program in</del>



<p>Master of Arts Admission Requirements ... Program Requirements All M.A. programs require ENGL 500 and an additional 27 credits.</p> <p>Thesis Option: The M.A. in Literature or Language requires completion of 21 credits of coursework with a minimum of 15 credits of coursework at the 500-level or above, plus a 9-credit thesis and oral examination. Coursework is selected in consultation with the program advisor.</p> <p>Course-based Option: For the course-based option, the M.A. in Literature or Language requires completion of 30 credits of coursework, including a minimum of 24 credits of coursework at the 500-level or above. Coursework is selected in consultation with the program advisor.</p> <p><b>&lt;b&gt;Emphasis in Science and Technology Studies for Doctoral and Masters Students&lt;b&gt;</b></p> <p><b>Both the Ph.D. and M.A. in English, offer students an opportunity to focus a portion of their studies towards an emphasis in Science and Technology Studies (STS). The STS emphasis offers opportunities for advanced research and study of scientific work and thought from a variety of perspectives associated with the humanities and social sciences. Students in the STS emphasis are required to take STS 501 (3), STS 502 (3), and STS 597 (M.A.) or STS 598 (Ph.D.).</b></p>	<p><del>English. Students in the STS research stream are required to take STS 501 (3), STS 502 (3), STS 598 (6). For more information on the STS specialization, refer to the <a href="#">STS website</a>.</del></p> <p>... Master of Arts Admission Requirements ... Program Requirements All M.A. programs require ENGL 500 and an additional 27 credits.</p> <p>Thesis Option: The M.A. in Literature or Language requires completion of 21 credits of coursework with a minimum of 15 credits of coursework at the 500-level or above, plus a 9-credit thesis and oral examination. Coursework is selected in consultation with the program advisor.</p> <p>Course-based Option: For the course-based option, the M.A. in Literature or Language requires completion of 30 credits of coursework, including a minimum of 24 credits of coursework at the 500-level or above. Coursework is selected in consultation with the program advisor.</p>
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**For more information on the STS emphasis, please see the [STS Webpage](#).**

Contact Information

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Contact Information

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**Type of Action:**

- Delete the current doctoral research stream in STS Calendar language for the Ph.D in English.
- Update the Academic Calendar to reflect the newly created emphasis in STS for the Ph.D. in English program and the newly created emphasis in STS for the M.A. in English program.
- Please place the heading in the same font size as “Master of Arts” and “Contact Information”.

**Rationale for Proposed Change:**

Budgetary considerations from the Faculty of Arts have made the current version of the M.A. in STS unsustainable. We are therefore moving to the existing doctoral model. This is mostly a procedural change that has few curricular consequences and that will achieve several goals: 1. align the Masters and Doctoral degrees so that relations between the STS Program and the participating departments are more transparent; 2. make student admissions and funding procedures flow more efficiently; 3. tighten the curricular relations between STS and participating departments; 4. Create/edit the STS option as an “emphasis” so that it is reflected on the academic record (transcript). From a budgetary perspective, there will be no more course buy-outs: STS 501 will be co-listed with the departments of the faculty teaching it (this is already the case for STS 502). Some speakers invited to the STS Colloquium Series (STS 597/598) will be coordinated with the Visiting Speakers Series in the participating departments. We will retain the M.A. in STS for able students who are not eligible for admission



	through the participating departments.
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### **Department of History**

<b>Category: (1) Faculty:</b> Arts <b>Department:</b> History <b>Faculty Approval Date:</b> 2016 May 05 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> February 23, 2016 <b>Contact Person:</b> Lois Nightingale <b>Phone:</b> 2-0048 <b>Email:</b> <a href="mailto:arts.curriculum@ubc.ca">arts.curriculum@ubc.ca</a>
<b>Proposed Curriculum Changes:</b> <i>Create the following emphasis that can be applied to the Doctor of Philosophy in History program:</i>  Doctor of Philosophy in History, <b>emphasis in Science and Technology Studies</b>	<b>Type of Action:</b> <ul style="list-style-type: none"> <li>• Update the current Science and Technology research stream for the Ph.D. in History to an emphasis In Science and Technology Studies</li> <li>• Display this emphasis on a students' transcript. It will not be reflected on the parchment.</li> </ul>
<b>Proposed Curriculum Changes:</b> <i>Create the following emphasis that can be applied to the Master of Arts in History program:</i>  Master of Arts in History, <b>emphasis in Science and Technology Studies</b>	<b>Type of Action:</b> <ul style="list-style-type: none"> <li>• Create new Science and Technology Studies (STS) emphasis in the M.A. in History program</li> <li>• Display this emphasis on a students' transcript. It will not be reflected on the parchment.</li> </ul>
<a href="#">The Faculty of Graduate and Postdoctoral Studies</a> <a href="#">Degree Programs</a> History  <b>Proposed Calendar Entry:</b> History ... Program Overview ... Doctor of Philosophy ...	<b>URL:</b> <a href="http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,204,828,1178">http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,204,828,1178</a>  <b>Present Calendar Entry:</b> History ... Program Overview ... Doctor of Philosophy ... <del>Doctoral Research Stream in STS</del> <del>The Science and Technology Studies (STS) research stream offers opportunities for advanced research and study of scientific work and thought from a variety of perspectives associated with the humanities</del>



<p>Master of Arts</p> <p>Admission Requirements Prerequisites for admission to the M.A. program include, but are not limited to, a four-year B.A. with History honours or History major. Consult the <a href="#">Department</a> for details.</p> <p>Program Requirements The M.A. program consists of 18 credits of coursework and a 40-page thesis.</p> <p><b>&lt;b&gt;Emphasis in Science and Technology Studies for Doctoral and Masters Students&lt;b&gt;</b></p> <p><b>Both the Ph.D. and M.A. in History offer students an opportunity to focus a portion of their studies towards an emphasis in Science and Technology Studies (STS). The STS emphasis offers opportunities for advanced research and study of scientific work and thought from a variety of perspectives associated with the humanities and social sciences. Students in the STS emphasis are required to take STS 501 (3), STS 502 (3), and STS 597 (M.A.) or STS 598 (Ph.D.).</b></p> <p><b>For more information on the STS emphasis, please see the <a href="#">STS Webpage</a>.</b></p> <p>Contact Information ...</p>	<p><del>and social sciences. It is a research stream within the Ph.D. degree program in history. Students in the STS research stream are required to take STS 501 (3), STS 502 (3), STS 598 (6). For more information on the STS specialization, visit the <a href="#">graduate program office</a>.</del></p> <p>...</p> <p>Master of Arts</p> <p>Admission Requirements Prerequisites for admission to the M.A. program include, but are not limited to, a four-year B.A. with History honours or History major. Consult the <a href="#">Department</a> for details.</p> <p>Program Requirements The M.A. program consists of 18 credits of coursework and a 40-page thesis.</p> <p>Contact Information ...</p> <p><b>Type of Action:</b></p> <ul style="list-style-type: none"> <li>• Delete the current doctoral research stream in STS Calendar language for the Ph.D in History.</li> <li>• Update the Academic Calendar to reflect the newly created emphasis in STS for the Ph.D. in History program and the newly created emphasis in STS for the M.A. in History program.</li> <li>• Please place the heading in the same font size as “Master of Arts” and “Contact Information”.</li> </ul> <p><b>Rationale for Proposed Change:</b> Budgetary considerations from the Faculty of Arts have made the current version of the M.A. in STS unsustainable. We are therefore moving to the existing doctoral model. This is mostly a procedural change</p>
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	<p>that has few curricular consequences and that will achieve several goals: 1. align the Masters and Doctoral degrees so that relations between the STS Program and the participating departments are more transparent; 2. make student admissions and funding procedures flow more efficiently; 3. tighten the curricular relations between STS and participating departments; 4. Create/edit the STS option as an “emphasis” so that it is reflected on the academic record (transcript). From a budgetary perspective, there will be no more course buy-outs: STS 501 will be co-listed with the departments of the faculty teaching it (this is already the case for STS 502). Some speakers invited to the STS Colloquium Series (STS 597/598) will be coordinated with the Visiting Speakers Series in the participating departments. We will retain the M.A. in STS for able students who are not eligible for admission through the participating departments.</p>
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#### **Department of Philosophy**

<p><b>Category: (1) Faculty:</b> Arts  <b>Department:</b> Philosophy  <b>Faculty Approval Date:</b> 2016 May 5  <b>Effective Session (W or S):</b> S  <b>Effective Academic Year:</b> 2017</p>	<p><b>Date:</b> February 23, 2016  <b>Contact Person:</b> Lois Nightingale  <b>Phone:</b> 2-0048  <b>Email:</b> <a href="mailto:arts.curriculum@ubc.ca">arts.curriculum@ubc.ca</a></p>
<p><b>Proposed: Curriculum Changes:</b>  <u>Create the following emphasis that can be applied to the Doctor of Philosophy in Philosophy program:</u></p> <p>Ph.D. in Philosophy, <b>emphasis in Science and Technology Studies</b></p>	<p><b>Type of Action:</b></p> <ul style="list-style-type: none"> <li>• Update the current Science and Technology research stream for the Ph.D. in Philosophy to an emphasis In Science and Technology Studies</li> <li>• Display this emphasis on a students’ transcript. It will not be reflected on the parchment.</li> </ul>
<p><b>Proposed: Curriculum Changes:</b>  <u>Create the following emphasis that can be applied to the Master of Arts in Philosophy</u></p>	<p><b>Type of Action:</b></p> <ul style="list-style-type: none"> <li>• Create new Science and Technology Studies (STS) emphasis in the M.A. in</li> </ul>





<p><u>program:</u></p> <p>Master of Arts in Philosophy, <b>emphasis in Science and Technology Studies</b></p>	<p>Philosophy program.</p> <ul style="list-style-type: none"> <li>• Display this emphasis on a students' transcript. It will not be reflected on the parchment.</li> </ul>
<p><a href="#">The Faculty of Graduate and Postdoctoral Studies</a>  <a href="#">Degree Programs</a>          "Philosophy"</p> <p><b>Proposed Calendar Entry:</b>          Philosophy          ...          Program Overview          ...          Doctor of Philosophy          ...</p> <p>Master of Arts          Admission Requirements          Students admitted to the M.A. degree program must have a B.A. or B.Sc. with at least 3-credits of coursework in formal logic and sufficient upper division work in the history of philosophy, ethics and value theory, and metaphysics, epistemology, or the philosophy of science to enable the student to undertake graduate-level work in these areas. They must also meet the general admission requirements for master's degree programs set by the Faculty of Graduate and Postdoctoral Studies.</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,204,828,1213">http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,204,828,1213</a></p> <p><b>Present Calendar Entry:</b>          Philosophy          ...          Program Overview          ...          Doctor of Philosophy          ...  <del>Doctoral Research Stream in STS</del>  <del>The Science and Technology Studies (STS) research stream offers opportunities for advanced research and study of scientific work and thought from a variety of perspectives associated with the humanities and social sciences. It is a research stream within the Ph.D. degree program in philosophy. Students in the STS research stream are required to take STS-501 (3), STS-502 (3), STS-598 (6). For more information on the STS specialization, visit the graduate program office.</del></p> <p>Master of Arts          Admission Requirements          Students admitted to the M.A. degree program must have a B.A. or B.Sc. with at least 3-credits of coursework in formal logic and sufficient upper division work in the history of philosophy, ethics and value theory, and metaphysics, epistemology, or the philosophy of science to enable the student to undertake graduate-level work in these areas. They must also meet the general admission requirements for master's degree programs set by the Faculty of Graduate and Postdoctoral Studies.          Program Requirements</p>



### Program Requirements

There are two options for the M.A.:

1. Thesis Option. This option requires 18 credits of coursework (a maximum of 6 credits at the 300- and 400-level, and a minimum of 12 credits at the 500-level or above) and a 12-credit thesis.
2. Non-thesis Option. This option requires 30 credits of coursework. Of these, 6 credits may be at the 300- or 400-level.

Prerequisites for the M.A. in Philosophy program include a Bachelor of Arts or Bachelor of Science with at least one term course in formal logic and sufficient upper division work in the history of philosophy, ethics and value theory, and metaphysics, epistemology, or the philosophy of science to enable the student to undertake graduate-level work in these areas.

### **<b>Emphasis in Science and Technology Studies for Doctoral and Masters Students<b>**

**Both the Ph.D. and M.A. in Philosophy offer students an opportunity to focus a portion of their studies towards an emphasis in Science and Technology Studies (STS). The STS emphasis offers opportunities for advanced research and study of scientific work and thought from a variety of perspectives associated with the humanities and social sciences. Students in the STS emphasis are required to take STS 501 (3), STS 502 (3), and STS 597 (M.A.) or STS 598 (Ph.D).**

**For more information on the STS emphasis, please see the [STS Webpage](#).**

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There are two options for the M.A.:

3. Thesis Option. This option requires 18 credits of coursework (a maximum of 6 credits at the 300- and 400-level, and a minimum of 12 credits at the 500-level or above) and a 12-credit thesis.
4. Non-thesis Option. This option requires 30 credits of coursework. Of these, 6 credits may be at the 300- or 400-level.

Prerequisites for the M.A. in Philosophy program include a Bachelor of Arts or Bachelor of Science with at least one term course in formal logic and sufficient upper division work in the history of philosophy, ethics and value theory, and metaphysics, epistemology, or the philosophy of science to enable the student to undertake graduate-level work in these areas.

Contact Information

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### **Type of Action:**

- Delete the current doctoral research stream in STS Calendar language for the Ph.D in Philosophy.
- Update the Academic Calendar to reflect the newly created emphasis in STS for the Ph.D. in Philosophy program and the newly created emphasis in STS for the M.A. in Philosophy program.
- Please place the heading in the same font size as “Master of Arts” and “Contact Information”.

### **Rationale for Proposed Change:**

Budgetary considerations from the Faculty of Arts have made the current version of the M.A. in STS unsustainable. We are therefore moving to the existing doctoral



	<p>model. This is mostly a procedural change that has few curricular consequences and that will achieve several goals: 1. align the Masters and Doctoral degrees so that relations between the STS Program and the participating departments are more transparent; 2. make student admissions and funding procedures flow more efficiently; 3. tighten the curricular relations between STS and participating departments; 4. Create/edit the STS option as an “emphasis” so that it is reflected on the academic record (transcript).. From a budgetary perspective, there will be no more course buy-outs: STS 501 will be co-listed with the departments of the faculty teaching it (this is already the case for STS 502). Some speakers invited to the STS Colloquium Series (STS 597/598) will be coordinated with the Visiting Speakers Series in the participating departments. We will retain the M.A. in STS for able students who are not eligible for admission through the participating departments.</p>
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**SOCI: Sociology Department**

<b>Category: (1) Faculty:</b> Arts <b>Department:</b> Sociology <b>Faculty Approval Date:</b> 2016 May 05 <b>Effective Session (W or S):</b> S <b>Effective Academic Year:</b> 2017	<b>Date:</b> August 2, 2016 <b>Dept. Contact:</b> Rima Wilkes <b>Email:</b> wilkesr@mail.ubc.ca
<b>Proposed:</b> <u>Create the following emphasis that can be applied to the Doctor of Philosophy in Sociology program:</u>  Doctor of Philosophy in Sociology, <b>emphasis in Science and Technology Studies</b>	<b>Type of Action:</b> <ul style="list-style-type: none"> <li>• Update the current Science and Technology research stream for the Ph.D. in Sociology to an emphasis in Science and Technology Studies</li> <li>• Display this emphasis on a students' transcript. It will not be reflected on the parchment.</li> </ul>
<b>Proposed:</b> <u>Create the following emphasis that can be applied to the Master of Arts in Sociology program:</u>  Master of Arts in Sociology, <b>emphasis in Science and Technology Studies</b>	<b>Type of Action:</b> <ul style="list-style-type: none"> <li>• Create new Science and Technology Studies (STS) emphasis in the M.A. in Sociology program</li> <li>• Display this emphasis on a students' transcript. It will not be reflected on the parchment.</li> </ul>
<u>The Faculty of Graduate and Postdoctoral Studies &gt; Degree Programs &gt; Sociology</u>  <b>Proposed Calendar Entry:</b> Sociology  Members ...  Program Overview ...  Doctor of Philosophy ...  Master of Arts ...  <b>&lt;b&gt;Emphasis in Science and Technology</b>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,1232">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,1232</a>  <b>Present Calendar Entry:</b> Sociology  Members ...  Program Overview ...  Doctor of Philosophy ...  Master of Arts ...  Contact Information

<p><b>Studies for Doctoral and Masters Students</b>&lt;b&gt;  <b>Both the Ph.D. and M.A. in Sociology, offer students an opportunity to focus a portion of their studies towards an emphasis in Science and Technology Studies (STS). The STS emphasis offers opportunities for advanced research and study of scientific work and thought from a variety of perspectives associated with the humanities and social sciences. Students in the STS emphasis are required to take STS 501 (3), STS 502 (3), and STS 597 (M.A.) or STS 598 (Ph.D).</b></p> <p><b>For more information on the STS emphasis, please see the <a href="#">STS Webpage</a>.</b></p> <p>Contact Information</p> <p>...</p>	<p>...</p> <p><b>Type of Action:</b></p> <ul style="list-style-type: none"> <li>• Insert information on the STS emphasis. This is a standard paragraph which also is included in the English, Philosophy and History calendar pages.</li> <li>• Please place the heading in the same font size as “Master of Arts” and “Contact Information”.</li> </ul> <p><b>Rationale for Proposed Change:</b>  The academic focus of the STS emphasis will be of interest to some of our Graduate Sociology students and we wish to ensure they have the opportunity to access this unique emphasis.</p>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: (2)

<b>Faculty:</b> Commerce and Business Administration <b>Department:</b> Sauder School of Business <b>Faculty Approval Date:</b> <b>Effective Session (W or S):</b> Winter Term 1 <b>Effective Academic Year:</b> 2016/17	<b>Date:</b> Mar 3, 2016 <b>Contact Person:</b> Kin Lo / Hilary Geise <b>Phone:</b> 2-8430 / 7-1732 <b>Email:</b> <a href="mailto:kin.lo@sauder.ubc.ca">kin.lo@sauder.ubc.ca</a> / <a href="mailto:hilary.geise@sauder.ubc.ca">hilary.geise@sauder.ubc.ca</a>
<b>Proposed Calendar Entry:</b>  Professional Master's Degrees  Contents Introduction → Master of Business Administration → International Master of Business Administration → Executive Master of Business Administration → Dual Degree Program Option: M.B.A./J.D. → Master of Management → Contact Information →  [Note: above list of items are all hyperlinked.]	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,0</a>  <b>Present Calendar Entry:</b>  Professional Master's Degrees  Contents Introduction → Master of Business Administration → International Master of Business Administration → Executive Master of Business Administration → Master of Management → Dual Degree Program Option: M.B.A./J.D. → <del>Joint M.B.A./M.A.A.P.P.S.</del> → Contact Information →  <b>Type of Action:</b> Remove the Joint MBA/MAAPPS program from the Academic Calendar and reorder the table of contents.  <b>Rationale for Proposed Change:</b> The MBA/MAAPS program is no longer offered. There are no remaining students enrolled in this program.
<b>Proposed Calendar Entry:</b> N/A	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1271">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1271</a>  <b>Present Calendar Entry:</b>  <del>Joint M.B.A./M.A.A.P.P.S.</del>  <del>Note: The Master of Arts in Asia Pacific Policy Studies (M.A.A.P.P.S.) program is not accepting applications for admissions until further notice. This also applies to the M.A.A.P.P.S. with Juris Doctor, M.A.A.P.P.S. with Master of Business Administration, and the</del>

	<p><del>M.A.A.P.P.S. with Master of Arts in Planning.</del></p> <p><del>This program permits students to obtain a combined M.B.A./M.A.A.P.P.S. (Master of Arts in Asia Pacific Policy Studies) degree. Students may apply to the Faculty and the Institute of Asian Research to pursue an enriched curriculum of business and Asia Pacific policy studies.</del></p> <p><b>Admission</b></p> <p><del>Students wishing to pursue the combined M.B.A./M.A.A.P.P.S. degree program must be admitted separately to the Faculty of Commerce for the M.B.A. degree and the Institute of Asian Research for the M.A.A.P.P.S. degree. In their application submissions to both institutions, students must indicate in writing their desire to enrol in the combined program and the desired area of specialization within the M.A.A.P.P.S. program. Enrolment in the combined degree program requires the consent of the Dean of the Faculty of Commerce and the Director of the Institute of Asian Research.</del></p> <p><b>Requirements</b></p> <p><del>Students enrolled in the M.B.A./M.A.A.P.P.S. Combined Degree Program are required to complete all course requirements for graduation in each of the M.B.A. and M.A.A.P.P.S. Programs, subject to the following adjustments:</del></p> <ol style="list-style-type: none"> <li><del>1. Students enrolled in the combined degree program who complete the M.A.A.P.P.S. core course (IAR 500) required for the M.A.A.P.P.S. degree will also receive 6 credits toward completion of their M.B.A. degree.</del></li> <li><del>2. Students enrolled in the combined degree program who complete 6 credits of Commerce course work acceptable to their respective M.B.A. and M.A.A.P.P.S. program supervisors will receive credit for these courses toward both the M.B.A. and the M.A.A.P.P.S. degrees.</del></li> </ol> <p><b>Combined Degree Program Committee</b></p> <p><del>The combined degree program is administered by a Combined Degree Program Committee comprised of a representative from the Faculty designated by the Dean of Commerce and a representative from the Institute of Asian Research designated by the Institute Director. The</del></p>
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~~Combined Degree Program Committee is responsible for admissions, coordinating graduate student supervision, and program approval. The Graduate Program Advisor from the Faculty serves as Graduate Program Advisor for the combined degree program.~~

### **~~Model Curriculum Schedule~~**

~~Normally the curriculum schedule is as follows:~~

~~Year One (September-December) ————— Credits~~

~~M.B.A. Core program (BA 500) ————— 18~~

~~(January-August)~~

~~M.B.A. Core Capstone (BA 501) ————— 1.5~~

~~M.B.A. Elective Requirements ————— 21~~

~~Year Two (September-December)~~

~~M.A.A.P.P.S. Core Course (IAR 500) begins~~

~~M.B.A. Course Requirements ————— 6~~

~~(January-August)~~

~~M.A.A.P.P.S. Core Course (IAR 500) completed — 6~~

~~M.A.A.P.P.S. Elective Requirements ————— 6~~

~~M.A.A.P.P.S. Thesis or Practicum Requirements — 12~~

~~Total Credits ————— 76.5 (M.B.A. 46.5/M.A.A.P.P.S. 30)~~

### **~~Conferring of Degrees~~**

~~The M.A.A.P.P.S. and M.B.A. will be conferred at the completion of the combined program after all requirements for both degrees have been met. Students who choose to receive either the M.A.A.P.P.S. or the M.B.A. prior to completing the combined program may apply for one of the degrees provided all requirements for that degree have been satisfied. Students selecting this option must simultaneously withdraw from the combined program.~~

### **Type of Action:**

Remove the Joint MBA/MAAPPS program from the Academic Calendar.

### **Rationale for Proposed Change:**

The MBA/MAAPS program is no longer offered. There are no remaining students enrolled in this program.



<p><b>Proposed Calendar Entry:</b></p> <p><b>Commerce and Business Administration</b></p> <p>Bachelor of Commerce <b>B.Com.</b></p> <p>Bachelor of Business in Real Estate <b>B.B.R.E.</b></p> <p>Executive Master of Business Administration <b>E.M.B.A.</b></p> <p>Master of Business Administration <b>M.B.A.</b></p> <p>Master of Business Administration with Juris Doctor <b>M.B.A./J.D.</b></p> <p>Master of Management <b>M.M.</b></p> <p>Master of Science in Business Administration <b>M.Sc. (Bus. Admin.)</b></p> <p>Doctor of Philosophy <b>Ph.D.</b></p> <p>Diploma in Accounting <b>Dip.Acct.</b></p> <p>Diploma in Urban Land Economics</p> <p>Certificate in Real Property Assessment</p> <p>Post-Graduate Certificate in Real Property Valuation <b>P.G.C.V.</b></p> <p>Post-Graduate Certificate in Technology-based Distributed Learning</p> <p>Post-Graduate Certificate in Technology-based Learning for Schools</p>	<p>URL: <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,4,11,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,4,11,0</a></p> <p><b>Present Calendar Entry:</b></p> <p><b>Commerce and Business Administration</b></p> <p>Bachelor of Commerce <b>B.Com.</b></p> <p>Bachelor of Business in Real Estate <b>B.B.R.E.</b></p> <p>Executive Master of Business Administration <b>E.M.B.A.</b></p> <p>Master of Business Administration <b>M.B.A.</b></p> <p>Master of Business Administration with Juris Doctor <b>M.B.A./J.D.</b></p> <p><del>Master of Business Administration with Master of Arts in Asia-Pacific Policy Studies</del> <b>M.B.A./M.A.A.P.P.S.</b></p> <p>Master of Management <b>M.M.</b></p> <p>Master of Science in Business Administration <b>M.Sc. (Bus. Admin.)</b></p> <p>Doctor of Philosophy <b>Ph.D.</b></p> <p>Diploma in Accounting <b>Dip.Acct.</b></p> <p>Diploma in Urban Land Economics</p> <p>Certificate in Real Property Assessment</p> <p>Post-Graduate Certificate in Real Property Valuation <b>P.G.C.V.</b></p> <p>Post-Graduate Certificate in Technology-based Distributed Learning</p> <p>Post-Graduate Certificate in Technology-based Learning for Schools</p> <p><b>Type of Action:</b> Remove the Joint MBA/MAAPPS program from the Academic Calendar.</p> <p><b>Rationale for Proposed Change:</b> The MBA/MAAPPS program is no longer offered. There are no remaining students enrolled in this program.</p>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<p><b>Faculty:</b> Education  <b>Department:</b> Curriculum &amp; Pedagogy  <b>Faculty Approval Date:</b> Nov. 7, 2016  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2017</p>	<p><b>Date:</b> June 30, 2016  <b>Contact Person:</b> Sandrine Han  <b>Phone:</b> 604-822-0537  <b>Email:</b> sandrine.han@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b>  (40 word limit for course descriptions)  EDCP 524 (3) Technology, Virtual Worlds,  and Digital Visual Culture in Art Education</p> <p>Foundations and conflicting conceptions of digital visual culture and art education. Theory and practice in the development and implementation of art education technology.</p>	<p><b>URL: EDCP 524</b>  (URL from the current web Calendar – not the draft calendar. This URL is not needed if you are only making changes to individual courses - for course entries simply list the course number.)</p> <p><b>Present Calendar Entry: N/A</b>  (Cut and paste from the current web Calendar.)</p> <p><b>Type of Action: New course</b>  (e.g., new course, delete course, etc.)</p> <p><b>Rationale for Proposed Change:</b>  When you have supporting documents for Category 1 proposals please label each document with the course number, or the name of the program, being proposed. The art education program at the Department of Curriculum and Pedagogy offers courses covering a variety of aspects of art education. However, within the current program there is no specific graduate course that deals with or addresses digital visual culture and art education. This unique course relates art education to technology and covers topics that other art education courses do not. This course also relates to other art education courses through the perspective of visual culture in art and art education. This course affords students the opportunity to inquire/investigate how digital visual culture presents, takes form, and plays out in virtual worlds. To date this course has been taught 3 times as EDCP 585, Special Course in Curriculum and Pedagogy.</p> <p style="text-align: center;"><b>Not available for Cr/D/F grading (undergraduate courses only)</b>  (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p><b>Rationale for not being available for Cr/D/F:</b> The default is that undergraduate courses are</p>

## THE UNIVERSITY OF BRITISH COLUMBIA

	<p>offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><b>Pass/Fail or Honours/Pass/Fail grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
<p><b>Proposed Calendar Entry:</b> (40 word limit.)</p>	<p><b>URL:</b> (URL from the current web Calendar – not the draft calendar. This URL is not needed if you are only making changes to individual courses - for course entries simply list the course number.)</p> <p><b>Present Calendar Entry:</b> (Cut and paste from the current web Calendar.)</p> <p><b>Type of Action:</b> (e.g., new course, delete course, etc.)</p> <p><b>Not available for Cr/D/F grading (undergraduate courses only)</b> (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p><b>Rationale for not being available for Cr/D/F:</b> The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><b>Pass/Fail or Honours/Pass/Fail grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Education <b>Department:</b> EDCP <b>Faculty Approval Date:</b> Nov. 7, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> August 24, 2016 <b>Contact Person:</b> Anne Phelan <b>Phone:</b> 2-8855 <b>Email:</b> anne.phelan@ubc.ca
<b>Proposed Calendar Entry:</b>  <div style="background-color: yellow; padding: 2px;">EDCP 542: (3) Theorizing Pedagogy</div>  <div style="background-color: yellow; padding: 2px;">Pedagogy as construed by teacher-researchers, curriculum thinkers, indigenous scholars, educational philosophers and cultural theorists.</div>	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b>  <p>As a sub-field of Curriculum Studies, pedagogy represents both a political and pragmatic attempt to shape particular forms of consciousness. As such, pedagogy is a key educational concern and deserves to be important focus for graduate studies in the Department of Curriculum and Pedagogy. The proposed course offers graduate students an opportunity to enter into a 'complicated conversation' about pedagogy that is at once theoretical and praxis-related. In the Department to date, courses that address issues of pedagogy are largely focused on the teaching of the disciplines. <i>Theorizing Pedagogy</i> will complement current department course offerings by addressing pedagogy from inter-disciplinary and trans-disciplinary perspectives. To date this course has been taught 3 times as EDCP 501, Master's Seminar.</p> <p style="text-align: center;"><b>Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p>(Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p><b>Rationale for not being available for Cr/D/F:</b> The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p style="text-align: center;"><b>Pass/Fail or Honours/Pass/Fail grading</b></p> <p>(Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>





## UBC Curriculum Proposal Form

### Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Education <b>Department:</b> Educational Studies <b>Faculty Approval Date:</b> Sept 20, 2016 <b>Effective Session (W or S):</b> 2017W <b>Effective Academic Year:</b> 2017/18	<b>Date:</b> March 1, 2016 <b>Contact Person:</b> Shauna Butterwick <b>Phone:</b> 822-3897 <b>Email:</b> shauna.butterwick@ubc.ca
<b>Proposed Calendar Entry:</b> EDST 530 Continuing Professional Education and Learning (3)  Study of the history, politics and pedagogical dimensions of continuing professional education	<b>URL:</b> n/a  <b>Present Calendar Entry:</b> n/a  <b>Type of Action:</b> Create new course  <b>Rationale for Proposed Change:</b> The course has been developed in response to requests from students across several programs for a course on continuing professional education, an area of practice many of our graduates are involved in. The course also helps to address a key area of research and practice within adult and higher education. Most professions have mandatory requirements for their members to undertake continuous forms of education and learning in order to retain their professional standing as such there is a significant commitment of resources, labour and time involving various stakeholders including professionals, educators and professional associations. The course adds to the knowledge base of students in adult, higher education and educational leadership and administration (and other fields) who will be or already are directly involved with the provision of CPE. The course provides students with knowledge of the history and development of professions, the politics of professionalization, the regulatory aspects of CPE that powerfully shape the provision and documentation of CPE, and the pedagogical dimensions of providing and evaluating effective programs.





## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Land and Food Systems <b>Department:</b> Soil Science (MLWS) <b>Faculty Approval Date:</b> Oct 31/16 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> 2016-09-19 <b>Contact Person:</b> L.M. Lavkulich <b>Phone:</b> 2-3477 <b>Email:</b> lml@mail.ubc.ca
<b>Proposed Calendar Entry:</b> <b>Program Requirements</b> (40 word limit for course descriptions)	<b>URL:</b> <b>Present Calendar Entry:</b> <b>Type of Action:</b> Create the course code LWS for courses that are required by the Professional MLWS program  <b>Rationale for Proposed Change:</b> The three letter code LWS is proposed as it reflects the degree MLWS – Masters of Land and Water Systems. There is documented confusion by applicants regarding courses required for the MLWS degree, as current required courses have the SOIL code. The LWS course code should eliminate the confusion between the MLWS program and the research based graduate Soil Science program. All required courses in the MLWS program, with the exception of FRE 302, will have the LWS code.
<b>Proposed Calendar Entry:</b>  <b>LWS 501 (3) Advanced Soil Processes</b> Land and water system evaluations and assessing resource development options: monitoring and modeling environmental systems. Equivalency: SOIL 501. <i>This course is not eligible for Credit/D/Fail grading.</i>	<b>URL:</b> n/a <b>Present Calendar Entry:</b> N/A <b>Program Requirements</b>  <b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b>  LWS 501 is being created and cross-listed with SOIL 501 so that prospective students for the Master of Land and Water Systems (MLWS) more easily identify the required courses for the MLWS program. The cross

	<p>listing will aid in eliminating confusion between the MLWS program and the research based graduate Soil Science program. Thus all required courses in the MLWS program, with the exception of FRE 302, will have the LWS code.</p> <p>Students in MLWS program will register for LWS 501, while Soil Science graduate program students- and students enrolled in other research based graduate programs will register in SOIL 501.</p>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Land and Food Systems <b>Department:</b> <b>Faculty Approval Date:</b> October 31, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2016	<b>Date:</b> Oct 20, 2016 <b>Contact Person:</b> Christine Scaman <b>Phone:</b> 2-1804 <b>Email:</b> christine.scaman@ubc.ca
<b>Proposed course code:</b>  <b>LWS</b>	<b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name</a>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code</a>  <b>Action:</b> Create new course code and add to the pages as noted above.  <b>Rationale:</b>  The new code – LWS – will allow students in the Master of Land and Water Systems (MLWS) to clearly identify courses required for their program.
<b>Proposed Calendar Entry:</b> (40 word limit for course descriptions)  <b>LWS</b> 510 (3) Land and Water Seminar <i>Credit will be given for only one of LWS 510 or SOIL 510</i> <i>This course is not eligible for Credit/D/Fail grading.</i>	<b>Present Calendar Entry:</b> (Cut and paste from the current web Calendar.)  <del>SOIL</del> 510 (3) Land and Water Seminar <i>This course is not eligible for Credit/D/Fail grading.</i>  <b>Type of Action:</b> Change of course code  <b>Rationale for Proposed Change:</b> The course code is being changed from SOIL to a new code, LWS to allow students in the Master of Land



	and Water Systems (MLWS) to clearly identify courses required for their program.
<p><b>Proposed Calendar Entry:</b></p> <p><b>LWS 515 (3) Integrated Watershed Management</b>  <i>Methods of watershed evaluation, land-water interactions, key aspects of hydrology, water quality and aquatic biota, land use impacts on water resources, community involvement, and integration of multiple land use activities and their cumulative impacts. Credit will be given for only one of LWS 515, SOIL 515 or RMES 515. This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>Present Calendar Entry:</b></p> <p><del>SOIL</del> 515 (3) <b>Integrated Watershed Management</b>  <i>Methods of watershed evaluation, land-water interactions, key aspects of hydrology, water quality and aquatic biota, land use impacts on water resources, community involvement, and integration of multiple land use activities and their cumulative impacts. Credit will be given for only one of SOIL 515 or RMES 515. This course is not eligible for Credit/D/Fail grading</i></p> <p><b>Type of Action:</b> Change of course code</p> <p><b>Rationale for Proposed Change:</b> The course code is being changed from SOIL to a new code, LWS to allow students in the Master of Land and Water Systems (MLWS) to clearly identify courses required for their program.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>LWS 548 (6) Major Project</b>  Professional paper on topics focusing on emerging issues in water and land resources.  <i>Credit will be given for only one of LWS 548 or SOIL 548</i>  <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>Present Calendar Entry:</b></p> <p><del>SOIL</del> 548 (6) <b>Major Project</b>  Professional paper on topics focusing on emerging issues in water and land resources. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b>Type of Action:</b></p>



	<p>Change of course code</p> <p><b>Rationale for Proposed Change:</b> The course code is being changed from SOIL to a new code, LWS to allow students in the Master of Land and Water Systems (MLWS) to clearly identify courses required for their program.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>LWS 550 (3) Professional Communications Strategies</b> <i>Credit will be given for only one of LWS 550 or SOIL 550</i></p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>Present Calendar Entry:</b></p> <p><del>SOIL</del> 550 (3) <b>Professional Communications Strategies</b> <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b>Type of Action:</b> Change of course code</p> <p><b>Rationale for Proposed Change:</b> The course code is being changed from SOIL to a new code, LWS to allow students in the Master of Land and Water Systems (MLWS) to clearly identify courses required for their program.</p>

<p><b>Faculty:</b> Land and Food Systems <b>Department:</b> Soil Science (MLWS) <b>Faculty Approval Date:</b> October 31, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017</p>	<p><b>Date:</b> 2016-09-19 <b>Contact Person:</b> L.M. Lavkulich <b>Phone:</b> 2-3477 <b>Email:</b> lml@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b> ... <b>Master of Land and Water Systems</b> ... <b>Program Requirements</b></p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,204,828,1234">http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=12,204,828,1234</a> <b>Present Calendar Entry:</b> ... <b>Master of Land and Water Systems</b> ... <b>Program Requirements</b></p>

<p>The M.L.W.S. degree requires 33 credits of coursework consisting of 21 credits of required courses (<b>LWS 501, LWS 510, LWS 515, LWS 550, FRE 302 or equivalent, and LWS 548</b>) plus 12 credits of restricted electives depending on which research stream the student has chosen. Of the 33 credits, a maximum of 6 credits may be at the 300 - 400 level, and <b>27</b> credits must be at the 500 level or higher.</p> <p>The M.L.W.S. degree offers two fields of concentration:</p> <ul style="list-style-type: none"> <li>a) Land and Water Systems</li> <li>b) Sustainable Soil Systems</li> </ul> <p>Each of these options has a separate set of 9 credits of option electives. Please check with the <a href="#">Program's website</a> for details.</p> <p>The M.L.W.S. degree is available on a full-time or part-time basis. Full-time students will normally begin in September and complete their program at the end of August in the following year, thus completing the degree in 12 months of intensive study. Part-time students can proceed at their own pace, except that they must complete, as a minimum, one academic term at the UBC Vancouver Campus.</p> <p>Each student will be required to complete a "professional paper" (<b>LWS 548</b>). This may be conducted off-campus and <b>is</b> co-supervised by a recognized professional (such as <b>a</b> Professional Agrologist, Biologist, Forester, Geoscientist), and a member of the UBC Soil Science group.</p> <p>...</p>	<p>The M.L.W.S. degree requires 33 credits of coursework consisting of 21 credits of required courses (<del>SOIL 501, SOIL 510, SOIL 515, SOIL 550, FRE 302 or equivalent, and SOIL 548</del>) plus 12 credits of restricted electives depending on which research stream the student has chosen. Of the 33 credits, a maximum of 6 credits may be at the 300 - 400 level, and <del>26</del> credits must be at the 500 -level or higher.</p> <p>The M.L.W.S. degree offers two fields of concentration:</p> <ul style="list-style-type: none"> <li>a) Land and Water Systems</li> <li>b) Sustainable Soil Systems</li> </ul> <p>Each of these options has a separate set of 9 credits of option electives. Please check with the <a href="#">Program's website</a> for details.</p> <p>The M.L.W.S. degree is available on a full-time or part-time basis. Full-time students will normally begin in September and complete their program at the end of August in the following year, thus completing the degree in 12 months of intensive study. Part-time students can proceed at their own pace, except that they must complete, as a minimum, one academic term at the UBC Vancouver Campus.</p> <p>Each student will be required to complete a "professional paper" <del>by registering into SOIL 548 (6)</del> . This may be conducted off-campus and co-supervised by a recognized professional (such as <del>a</del> Professional<del>;</del> Agrologist, Biologist, Forester, Geoscientist), and a member of the UBC Soil Science group.</p> <p>...</p> <p><b>Type of Action:</b> Replace the SOIL courses code with LWS for the calendar entry for the MLWS program and make editorial corrections for clarity.</p> <p><b>Rationale for Proposed Change:</b> The updates to the calendar description for the MLWS program reflect the creation of the -new LWS course code (proposed in this package). The new course code helps to clarify the difference between the two programs. <u>Also, the adjustment from 26 to 27 credits</u></p>
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	<u>(in relation to the 500 level courses or higher) is to amend a past oversight that was incorrectly listed in the Calendar.</u>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Land and Food Systems <b>Department:</b> Soil Science (MLWS) <b>Faculty Approval Date:</b> Oct 31/16 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> 2016-09-19 <b>Contact Person:</b> L.M. Lavkulich <b>Phone:</b> 2-3477 <b>Email:</b> lml@mail.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>LWS 517 (3) Land and Water Resource Evaluation</b> <b>Topics in land and water system evaluations and assessing resource development options: monitoring and modeling environmental systems.</b> <b>Equivalency: SOIL 517. This course is not eligible for Credit/D/Fail grading.</b>	<b>Present Calendar Entry:</b>  N/A <b>Program Requirements</b> <b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b>  LWS 517 is being created and cross-listed with SOIL 517 so that prospective students for the Master of Land and Water Systems (MLWS) more easily identify the required courses for the MLWS program. The cross listing will aid in eliminating confusion between the MLWS program and the research based graduate Soil Science program. Thus all required courses in the MLWS program, with the exception of FRE 302, will have the LWS code. Students in MLWS program will register for LWS 517, while Soil Science graduate program students and students enrolled in other research based graduate programs will register in SOIL 517.



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Land and Food Systems <b>Department:</b> Food and Resource Economics <b>Faculty Approval Date:</b> October 19, 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> September 26, 2016 <b>Contact Person:</b> Carol McAusland <b>Phone:</b> 2-3350 <b>Email:</b> Carol.McAusland@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>FRE 522 (1.5) Environmental Externalities in the Global Economy</b>  <b>Prerequisite</b> FRE 502 (Food Market Analysis) and FRE 526 (Environmental Economics and Policy – Theory)	<b>Present Calendar Entry:</b> None.  <b>Type of Action:</b> Create a new course.  <b>Rationale for Proposed Change:</b> This course offers more flexibility to Master of Food and Resource Economics students. It also strengthens course offerings in the area of environmental and resource economics. This course applies economic theory and econometric techniques to the management of environmental externalities in international contexts.

**NEW PROGRAM PROPOSAL: MASTER OF GLOBAL SURGICAL CARE**  
**FACULTY OF MEDICINE**  
**UNIVERSITY OF BRITISH COLUMBIA**

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## 1. Executive Summary

### 1.1 Overview

The University of British Columbia has effectively created a learning environment that fosters global citizenship. Internationalization of higher education is a challenging goal that students increasingly demand of academic institutions. The attainment of global relevance is a constantly evolving process, throughout every aspect of the three core missions of the University: research, teaching and learning, and community engagement.

The Faculty of Medicine's (Department of Surgery) proposed Masters in Global Surgical Care is inspired by this goal of internationalization. It offers the unique combination of learning experiences to provide students in health-care related disciplines with a comprehensive and innovative education, enabling them to build on their disciplinary knowledge and skills. The program will expand students' knowledge of conditions, and global circumstances, that shape surgical care internationally.

### 1.2 Contribution to UBC's Mandate and Strategic Plan

*"As one of the world's leading universities, The University of British Columbia creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world."*

*Place and Promise: The UBC Plan, our vision statement*

The proposed Masters program will contribute to UBC's goal of student learning and professional development by offering educational opportunities in the growing field of Global Surgical Care. We will engage the community by promoting collaboration with local and global stakeholders in the areas of academic research and hands-on fieldwork placements in low resource settings. The program will offer an exceptional learning environment for students and faculty, attracting students from around the world to learn about Global Surgical Care. Graduates of the program will be sought after Ambassadors for the program and the University.

### 1.3 Rationale

Consultations with stakeholders have revealed that surgical care clinicians, residents in training and health professionals from many disciplines wish to incorporate international surgical care into their careers. They actively seek out institutions offering global experiences, that allow them to pursue training and experiences to prepare them to make effective contributions in addressing the surgical care problems of underserved populations either nationally or internationally.

Global surgical care delivery projects, international partnerships focused on surgical care education and research, and global disasters either man made or natural requiring a surgical care response all highlight the opportunities and necessity for appropriately trained health professionals. Unfortunately, these opportunities can prompt unease in healthcare related professionals who are asked to provide surgical and other services for which they are ill-equipped, either due to deficiency in training or emotional preparedness. As a result, approaches to care, while well-intentioned, can be inappropriate and detrimental to patients.

This Masters program bridges the gap between the international demand and the health professional's education to meet the learning needs of this growing cadre of students. Currently, there are no accredited

graduate-level degree programs available to this cadre that focus on surgical care issues and this proposed Masters program would be unique in the world.

#### **1.4 Objectives**

The Masters program will position UBC as a leading institution for continuing education training of current leaders and for the training of tomorrow's leaders in the global surgical care field.

Upon completion of this Masters program students will be able to:

- Articulate and discuss both historical and current dimensions of the evolving global surgical care discipline;
- Apply critical thinking to current and proposed global surgical care projects and programs;
- Provide leadership in global surgical care, including in the areas of care delivery, infrastructure development, education and research;
- Analyse barriers to surgical care in underserved populations globally, including both internationally and within Canada (e.g. rural Indigenous communities) and foster solutions;
- Initiate, design, implement and evaluate a surgical care project (research or educational development) in partnership with host colleagues of a low resource setting globally;
- Critique programs of disaster mitigation and contribute to disaster readiness both nationally and internationally;
- Actively contribute to monitoring and evaluation programs of global health initiatives;
- Provide leadership in advocacy at decision making levels for addressing the unmet surgical care burden of underserved populations globally;
- Apply the skills of one's own professional background to the spectrum of the global surgical care discipline.

#### **1.5 Demand for the Program**

Surveys of the Graduate Certificate in Global Surgical Care (GCGSC) launch cohort (15 students, 100% response rate), reveal that 93% of current Certificate students plan to enroll in the MGSC as soon as it becomes available. Findings gathered from a 2012 UBC Sauder School MBA led Marketing Plan, combined with consultations from a variety of B.C., Canadian, and internationally led organizations involved in healthcare, education, human resources, international development, and eLearning (e.g. Canadian Network for International Surgery, Canadian Red Cross, King's College London, and McGill University etc.), support the continued development of the academic program being offered through the Branch for International Surgical Care. A few highlights include:

- A definite interest by industry stakeholders and past students in taking a Global Surgery focused Masters in the future.
- It was also noted that our courses are unique and that was attractive to participants and stakeholders in that it gave them a chance to show leadership.
- The interest rating in global surgery was already quite high at 75% of those surveyed and that number was predicted to continue to increase on an annual basis.

Feedback from surveys, consultations, and analysis has helped shape the format of the proposed program, in particular emphasising the need for improved surgical care in Canada's Indigenous communities, as well as, the importance of fieldwork for our target student demographic.

#### **1.6 Program Strengths**

The program will:

- Provide a unique link between content experts from across the global health community and graduate students to develop policy and support scalable solutions for the development of functional surgical care systems.
- Address the gap that exists between surgical need and the equitable provision of safe surgical care in low resource settings, including areas of conflict, natural disaster, and in high-income countries with regional disparities in health care (remote Indigenous communities within Canada).
- Give students the option to ladder a Graduate Certificate in Global Surgical Care (already in place) into a unique Masters degree; in accordance with Senate regulations (Appendix A).
- Address issues of leadership, culture, and communication as a core component of global health systems, and incorporate a foundation of program planning and evaluation combined with research skills that can be directly applied to the delivery and governance of global surgical care.
- Incorporate multidisciplinary and interdisciplinary foci into the curriculum and bring together current and new knowledge from allied health professions within the field.
- Be available across Canada, and internationally using an on-line model.
- Include a six-credit field practicum, which will enable students to synthesize the knowledge gained from the coursework, transfer their knowledge to one aspect of International Surgical Care practice, and demonstrate achievement of the Masters Program objectives.
- Have flexible admission requirements to allow exceptional multidisciplinary global surgical care leaders to be accepted into the program to enhance professional collaboration in the field.
- Provide an opportunity to learn within a multidisciplinary environment with access to world leading experts in research and practical real world applications.

### **1.7 Linking learning outcomes and curriculum design**

In recent years there has been a growing interest and active involvement in the field of global surgical care among both clinicians and trainees. In the past two decades, centres of Global Surgical Care have been established in eight of Canada's seventeen University Medical Schools. Professional Societies such as the Canadian Association of General Surgeons and the Canadian Society of Obstetricians & Gynecologists have created committees to coordinate this interest and activity among their members. The World Health Association established a priority section on Global Surgery in 2005 and the Lancet sponsored an international-wide commission on the topic leading to the important Lancet Report in 2015. Yet, a common observation by both travelling participants and host colleagues is that the participants are academically unprepared to credibly apply their professional skills to the low-resource, cross cultural experience. This has led to a growing request for such educational programs in the discipline of global surgical care.

The curriculum of the proposed Masters in Global Surgical Care is designed to academically focus on the depth of understanding and knowledge required for surgical care professionals to apply their skills in low resource settings globally. Courses have been specifically created to address the major causes of global unmet surgical care burden of disease. Designed on-line didactic content, interactive discussions, literature reviews and reflective assignments on topics from these major causes emphasize both the understanding and the application of that understanding to provide needed leadership in the discipline. Graduates will be capable of giving that leadership. Courses on project and research methodology and on monitoring and evaluation methodology, together with a supervised field practicum will enable graduates to determine barriers, challenges and opportunities present in unmet surgical care burdens and to propose and facilitate solutions, in partnership with national host colleagues, to these burdens. They will significantly contribute both as prepared participants and as leaders in the discipline.

## **2. Program Description and Specifics**

### **2.1 Curriculum Overview**

The Masters in Global Surgical Care is a 30 credit program delivered online over two years. It is designed to meet the growing need for professional development of students interested in focusing on the global health problem of the burden of unmet surgical care. Students will complete nine online courses, including a field practicum in a low resource setting.

The focus in Year 1 of the program is to provide students with a foundation in international healthcare by exploring the principles of development, indigenous experiences, ethics, program planning, monitoring & evaluation, and humanitarian disaster response. Each course brings different and complementary essential aspects, providing depth and breadth to unique subjects in global surgical care. Students will relate cross-functional perspectives to their current professional roles. Learning will focus on students reviewing research journal articles, viewing pre-recorded videos, completing course specific tasks and assignments as well as engaging in facilitated online discussion forums.

In the second year of the program, students will deepen their understanding through a series of specialized courses, applying knowledge and skills to real international surgical care problems. Within their online classroom students will complete comprehensive self-identified research, course specific assignments, participate in facilitated online discussion, and ground their learning in a field practicum. All courses are required components for program completion. Please see Appendix A for additional information on course components.

#### **2.1.1 Target Learners**

1. Surgical care clinicians, trainees in surgical care disciplines, allied health professionals or trainees involved, or who wish to be involved, in global surgical care programs
2. Students who have successfully completed any of the SURG courses or the Graduate Certificate in Global Surgical Care and want to complete the Masters
3. Students who already have a Masters degree in a related field who are interested in incorporating international surgery into their careers

#### **2.1.2 Program Completion Time**

Anticipated time for completion of the program is 2 years of full-time academic study; as a professional program we expect and will accommodate part-time students.

### **2.2 Program Delivery and Schedule**

This 30 credit program delivered synchronously online, through Distance Education (Centre for Teaching, Learning and Technology) offered online through the Connect system, and scheduled throughout the fall and winter terms.

#### **Full-Time**

*Year 1:* SURG 510 (3 credits), SURG 512 (3 credits), SURG 514 (3 credits), SPPH 540 (3 credits), and SPPH 517 (3 credits): Total 15 Credits

*Year 2:* SURG 518 (3 credits), SURG 542 (3 credits), SURG 560 (6 credits) and Electives (3 credits): Total 15 Credits

**Part-Time**

*Year 1:* SURG 510 (3 credits), SURG 512 (3 credits), SPPH 540 (3 credits), and Electives (3 credits):

Total 12 Credits

*Year 2:* SURG 518 (3 credits), SURG 514 (3 credits), and SPPH 517 (3 credits): Total 9 Credits

*Year 3:* SURG 542 (3 credits) and SURG 560 (6 credits): Total 9 Credits

**2.3 Student Admission Criteria**

Applicants must meet minimum entry requirements established by Graduate and Post-Doctoral Studies and (a) hold either an MD or other health-care-related degree; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.

**2.4 Proposed Credential to be awarded**

Master of Global Surgical Care (M.G.S.C.)

**2.5 Faculty Offering Program**

The program will be offered and delivered by the Faculty of Medicine, UBC.

**2.6 Anticipated Start Date**

The program will be offered initially in the 2017/2018 academic year, beginning in September 2017.

**2.7 Related Programs at UBC or other BC Post-secondary Institutions**

A Graduate Certificate in Global Surgical Care (GCGSC) is currently offered by the Branch for International Surgical Care at UBC. This Graduate Certificate is comprised of SURG courses developed from 2009 to 2014 and will ladder into the Masters program (Appendix D). There are no other related programs in BC.

**2.8 Contact Information:**

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### 3. UBC Curriculum Proposal Form

#### 3.1 New Program Proposal: MGSC

#### THE UNIVERSITY OF BRITISH COLUMBIA

### UBC Curriculum Proposal Form

#### Category: (1)

<b>Faculty:</b> Medicine <b>Schools:</b> Surgery <b>Faculty Approval Date:</b> Nov 23, 2016 <b>Effective Session:</b> Winter <b>Year:</b> 2017W	<b>Date:</b> TBD <b>Contact Person:</b> Dr. Brian D. Westerberg <b>Phone:</b> 604-875-5372 <b>Email:</b> BWesterberg@providencehealth.bc.ca surgery.international@ubc.ca
<b>Proposed Calendar Entry:</b>  Masters of Global Surgical Care  Program Overview  The Masters of Global Surgical Care (MGSC) is a program within the Faculty of Medicine.  This online two-year, 30 credit specialized program is designed to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.  The program provides a strong foundation for present and future global surgical care professionals by developing knowledge and skills in the interpretation and use of published experience and research, balanced with applied learning in low resource settings.  A blended model of practicum based learning and on-line teaching methods facilitate the participation of candidates from across Canada and around the world.  <b>Admission Requirements</b>  <b>Candidates must meet <a href="#">minimum admission requirements</a> established by the Faculty of Graduate and Post-Doctoral Studies.</b> <b>Applicants should: (a) hold a health-care-</b>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,209,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,209,0,0</a>  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new master's program in Global Surgical Care  <b>Rationale:</b>  The creation of this program has been driven, in part, to address an unfilled educational need presented by rapidly growing interest in academic global health programs, in part by a desire to collaborate between the Faculty of Medicine and the School for Population and Public Health and in part to raise UBC's profile and to attract students (both within Canada and abroad), and to collaborate internationally.  Surgical care clinicians, residents in training and health professionals from many disciplines wish to incorporate international surgical care into their careers. They are pursuing training and experiences that will prepare them to make effective contributions in addressing the surgical care problems of low resource settings globally. Global surgical care delivery projects, international partnerships focused on surgical care education and research and global disasters requiring a surgical care response all highlight

related degree such as Doctor of Medicine (MD), Nursing (BSN), Midwifery (BMW) etc.; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.

For complete application and admission information please see the MGSC program's [website](#).

Applicants who do not meet the academic requirements stated above, but who have had other significant formal training, relevant professional experience, and/or otherwise possess demonstrable knowledge or expertise that would prepare them adequately for successful study in the graduate program, may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of Graduate and Postdoctoral Studies.

Applicants from a university outside Canada in which English is not the primary language of instruction must present evidence of English language proficiency prior to being extended an offer of admission. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding English Language Proficiency Requirements. Applicants who do not meet English language proficiency requirements may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of Graduate and Postdoctoral Studies.

### Transfer Credit

The transfer credit policy is outlined by the Faculty of Graduate and Postdoctoral Studies. For more information, refer to the Faculty of Graduate and Postdoctoral

the opportunities for physicians to help. Unfortunately, these opportunities also prompt unease at often being asked to provide surgical and other services for which they are ill-equipped and that may impose approaches to care that, while well-intentioned, are inappropriate. This master's program bridges that gap and meets the learning needs of this growing cadre of students. Currently, there are no accredited graduate-level degree programs available to this cadre that focus on surgical care issues and this proposed master's program would be unique in the world.

In 2015, the Branch for International Surgical Care launched the first-ever online graduate certificate program focusing on International Surgery. This Graduate Certificate in Global Surgical Care (GCGSC) is comprised of SURG courses developed from 2009 to 2014 and will ladder into the master's program. Graduates of SURG courses as well as surgery-related clinicians and residents across Canada and abroad have expressed a strong desire for additional courses that will lead to a master's program in international surgical care. This conclusion was reinforced in an independent study by a masters student of the Sauder School of Business examining the development of a masters program in global surgical care.

These courses are delivered entirely online, are extremely innovative and contribute to UBC's strategic goal of strengthening its presence as a globally influential university and its reputation as an international leader in health education, research and community service.

The Canadian Low Resource Settings Stream will not be listed on the transcript

**Studies' entry in the Academic Calendar regarding Transfer Credits.**

**Program Requirements**

Students will be required to complete 30 credits of SURG and SPPH courses which include a 6 credit Global Surgical Care Field Practicum.

1. SURG 510 (3)
2. SURG 512 (3)
3. SURG 514 (3)
4. SPPH 540 (3)
5. SPPH 517 (3)
6. SURG 518 (3)
7. SURG 542 (3)
8. SURG 560 (6)
9. Electives (3) Approved by the Program Director

**Canadian Low Resource Settings Stream**

The MGSC Canadian Low Resource Settings Stream is an interdisciplinary specialized stream. Students can choose to complete the MGSC with an intense focus on the unique issues affecting surgical care in rural and remote low resource settings in Canada.

In order to complete the MGSC Canadian Low Resource Settings Stream, students must declare their interest in completing the stream to the Program Director upon entry into the program and must complete the following requirements:

- (1) SURG 560(6) – Global Surgical Care Field Practicum must be completed in Canada
- (2) SURG 542(3) – Topic selected for Directed Study in Global Surgical Care must be closely connected to Canada and approved by the Program Director as an appropriate topic for the Canadian Low Resource Settings Stream

Satisfactory progress as defined by the Faculty

<p>of Graduate and Postdoctoral Studies for Master's students must be maintained. Students must complete their requirements within 5 years of starting the program. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding <a href="#">Academic Progress</a>.</p>	
<p><b>Proposed Calendar Entry:</b></p> <p>SURG 518 (3) Surgical Care in Canada's Rural and Remote Indigenous Communities with Global Comparisons</p> <p>Online Course. Critiques the current and historical provision of surgical care services to indigenous communities in Canada and globally. Examines challenges and opportunities confronting both the clinician and the service delivery system, embracing lessons learned from these communities.</p> <p><i>This course is not eligible for Credit/D/Fail grading. Prerequisite: SURG 510</i></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b>  The recent influential publication of the Lancet Commission on Global Surgery includes the statement that underserved communities in high income countries constitute a neglected area; the recent United Nations Declaration of the Rights of Indigenous Peoples includes health care rights; the recent Canadian Summit on Surgical Care in Rural Regions of Canada makes special mention of the underserved indigenous communities. After a long history of objection the Canadian Federal Government has announced its acceptance of the United Nations Declaration of the Rights of Indigenous Peoples in May 2016. These high-level conclusions highlight the need to address this important topic, yet no academic courses which address these issues exist to date. This course will provide the background knowledge and discussion format for clinicians and policy makers to both understand the complexity and seek solutions in this neglected surgical care area. By offering this unique course, UBC will be seen as a leader in responding to both national and international concern. It also draws on indigenous voices and will have synergy with UBC's Centre for Indigenous Health. The course will promote critical thinking on, and ultimately will improve, the provision of surgical care services to remote indigenous</p>

	communities in Canada and abroad.
<p><b>Proposed Calendar Entry:</b></p> <p>SURG 542 (3) Directed Study in Global Surgical Care</p> <p>Online course. Literature review of a global surgical care topic chosen in consultation with an advisor. Includes analysis of existing literature and research, and identification of gaps in current knowledge.</p> <p><i>This course is not eligible for Credit/D/Fail grading. Prerequisite: SURG 510, 512, and 514</i></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b>  Global Surgical Care, although practiced for centuries, is only recently an emerging discipline within Global Health. Therefore, the body of published literature on any given surgical care topic, although increasing rapidly, is scattered and not well known, handicapping global surgical care professionals. Such professionals represent a number of sub-disciplines within surgical care (e.g. surgery, anaesthesia, obstetrics, nursing, rehabilitation, surgical project administration, etc.). This course will provide opportunity for the student to carry out an exhaustive search of the world literature, both of the mainstream resources and also of the “grey” literature (e.g. masters theses, conference presentations, major NGO reports) on a global surgical care topic within the student’s own sub-discipline, to present an analysis of the literature and to postulate the need and direction for future publications. Such activity will not only promote knowledge acquisition and critical thinking for the student but will contribute significantly to the education of peers and to UBC’s Global Surgical Care knowledge repository.</p>
<p><b>Proposed Calendar Entry:</b></p> <p>SURG 560 (6) Global Surgical Care Field Practicum</p> <p>Online Course with a four to eight week on-site field placement. Proposal development, implementation and high-level written report of a surgical care field practicum in an underserved location globally, producing</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b></p>

<p>practical “on-the-ground” skills <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><i>Prerequisite:</i> SURG 510, 512, 514, and SPPH 540</p>	<p>This course is the field experience of the MGSC program. Because the Masters is a professional degree based on course content, this course will provide opportunity for “grounding” of the knowledge and skills attained in the other courses of the program. It will enable students to synthesize the knowledge gained from the coursework, transfer their knowledge to one aspect of International Surgical Care practice, and demonstrate achievement of the Masters program objectives. Also, the written report could well provide the basis for a publication or for a major conference presentation.</p>
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## 3.2 Change to Program: GCGSC

THE UNIVERSITY OF BRITISH COLUMBIA

## UBC Curriculum Proposal Form Change to Course or Program

**Category: (2)**

<b>Faculty:</b> Medicine <b>Schools:</b> Surgery <b>Faculty Approval Date:</b> Nov 23, 2016 <b>Effective Session:</b> Winter <b>Year:</b> 2017W	<b>Date:</b> TBD <b>Contact Person:</b> Dr. Brian D. Westerberg <b>Phone:</b> 604-875-5372 <b>Email:</b> BWesterberg@providencehealth.bc.ca surgery.international@ubc.ca
<b>Proposed Calendar Entry:</b> (40 word limit for course descriptions)  Graduate Certificate in Global Surgical Care This is an online program that aims to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,209,965,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,209,965,0</a>  <b>Present Calendar Entry:</b>  <b>Graduate Certificate in Global Surgical Care</b> This is an online program that aims to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.
<u><b>Admission Requirements</b></u>  <u>Candidates must meet minimum admission requirements established by the Faculty of Graduate and Post-Doctoral Studies.</u> <u>Applicants should: (a) hold a health-care-related degree such as Doctor of Medicine (MD), Nursing (BSN), Midwifery (BMW) etc.; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.</u>  <u>For complete application and admission information please see the MGSC program's website.</u>  <u>Applicants who do not meet the academic requirements stated above, but who have had other significant formal training, relevant professional</u>	<u><b>Admission</b></u> <del>Criteria for admission to the certificate program will be the same as those required for admission to Master's programs at UBC, as outlined by the Faculty of Graduate and Postdoctoral Studies.</del> For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Master's Admissions. <del>For complete application information please see the certificate program's website.</del> <del>This program is intended for surgical care clinicians, trainees in surgical care disciplines, allied health professionals or trainees involved, or who wish to be involved, in global surgical care programs.</del>  <b>Certificate Requirements</b> All students must complete the following four courses (12 credits): SURG 510 (3);

experience, and/or otherwise possess demonstrable knowledge or expertise that would prepare them adequately for successful study in the graduate program, may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of Graduate and Postdoctoral Studies.

Applicants from a university outside Canada in which English is not the primary language of instruction must present evidence of English language proficiency prior to being extended an offer of admission. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding English Language Proficiency Requirements. Applicants who do not meet English language proficiency requirements may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of Graduate and Postdoctoral Studies.

For complete application information please see the certificate program's website.

#### Admission Requirements

Candidates must meet minimum entry requirements established by Graduate and Post-Doctoral Studies. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Master's Admissions.

Applicants must: (a) hold either an MD or other health-care-related degree; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically,

SURG 512 (3); SURG 514 (3); SPPH 540 (3). Satisfactory progress as defined by the Faculty of Graduate and Postdoctoral Studies for Master's students must be maintained. Students must complete their requirements within 4 years of starting the program. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Academic Progress.

#### **Type of Action:**

Change the Graduate Certificate in Global Surgical Care admission requirements.

#### **Rationale for Proposed Change:**

This change will allow students to ladder the Graduate Certificate in Global Surgical Care into the proposed Master of Global Surgical Care.



~~educationally, administratively or in research.~~

~~Applicants from a university outside Canada in which English is not the primary language of instruction must present evidence of English language proficiency prior to being extended an offer of admission. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding [English Language Proficiency Requirements](#).~~

~~Applicants who do not meet both the academic and English language proficiency requirements stated above, but who have had other significant formal training, relevant professional experience, and/or otherwise possess demonstrable knowledge or expertise that would prepare them adequately for successful study in the graduate program, may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of the Faculty of Medicine.~~

~~For complete application information please see the certificate program's [website](#).~~

### **Certificate Requirements**

All students must complete the following four courses (12 credits): SURG 510 (3); SURG 512 (3); SURG 514 (3); SPPH 540 (3). Satisfactory progress as defined by the Faculty of Graduate and Postdoctoral Studies for Master's students must be maintained. Students must complete their requirements within **5** years of starting the program. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding [Academic Progress](#).

## 7. Appendix A: Program Components

### 7.1 GCGSC and MGSC Comparative Table

	Graduate Certificate in Global Surgical Care	Master of Global Surgical Care
<b>Admissions Criteria</b>	<p>Candidates must meet <a href="#">minimum entry requirements</a> established by Graduate and Post-Doctoral Studies. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Master's Admissions.</p> <p>Applicants must: (a) hold either an MD or other health-care-related degree; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.</p>	<p>Candidates must meet <a href="#">minimum entry requirements</a> established by Graduate and Post-Doctoral Studies. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Master's Admissions.</p> <p>Applicants must: (a) hold either an MD or other health-care-related degree; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.</p>
<b>Overview</b>	<p>This is an online program that aims to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.</p> <ul style="list-style-type: none"> <li>• Launched in September 2015</li> <li>• Current enrollment of 18 students</li> <li>• 140 students have completed one or more GCGSC required course</li> </ul>	<p>This online two-year, 30 credit specialized program is designed to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.</p> <p>The program provides a strong foundation for present and future global surgical care professionals by developing knowledge and skills in the interpretation and use of published experience and research, balanced with applied learning in low resource settings.</p> <p>A blended model of practicum based learning and on-line teaching methods facilitate the participation of candidates from across Canada and around the world.</p>
<b>Program Requirements</b>	<p>Students will be required to complete 12 credits of SURG and SPPH courses.</p> <ol style="list-style-type: none"> <li>1. SURG 510 (3)</li> <li>2. SURG 512 (3)</li> <li>3. SURG 514 (3)</li> <li>4. SPPH 540 (3)</li> </ol>	<p>Students will be required to complete 30 credits of SURG and SPPH courses which include a 6 credit Global Surgical Care Field Practicum.</p> <ol style="list-style-type: none"> <li>1. SURG 510 (3)</li> <li>2. SURG 512 (3)</li> <li>3. SURG 514 (3)</li> <li>4. SPPH 540 (3)</li> <li>5. SPPH 517 (3)</li> <li>6. SURG 518 (3)*</li> <li>7. SURG 542 (3)*</li> <li>8. SURG 560 (6)*</li> <li>9. Electives approve by Program Director (3)</li> </ol> <p>*indicates new course</p>
<b>Passing Grade</b>	Satisfactory <a href="#">Academic Progress</a> as defined by the Faculty of Graduate and Postdoctoral Studies for Master's students must be maintained.	Satisfactory <a href="#">Academic Progress</a> as defined by the Faculty of Graduate and Postdoctoral Studies for Master's students must be maintained.

## 7.2 Transfer Credit Policy: UBC Academic Calendar Excerpt

[UBC policy](#) allows graduate certificate programs to ladder into a specifically affiliated UBC master's degree. In such cases, courses taken to satisfy the requirements of a UBC graduate certificate may be fully transferable to the affiliated master's program, even if the certificate has been or will be awarded, provided that:

- a) The graduate certificate admission criteria are the same as the master's degree admission criteria. Note that students in a graduate certificate program will need to apply and be accepted to the master's program.
- b) The graduate certificate offers the same courses that comprise part of the master's course requirements.
- c) The passing grade for the graduate certificate program is the same as for the master's program.
- d) The courses that comprise the graduate certificate program are 500-level courses that have been approved by the UBC Senate.

## 7.3 MGSC Course Descriptions

**SURG 510 (3): Surgical Care in International Health.** Students will examine the historical beginnings, the reasons for the emergence of surgical care in the public health agenda and the details of the global burden of surgical care need. They will explore the wide spectrum of volunteerism, ethics related to clinical care and research in low resource settings, guidelines for activity (projects, programs, partnerships) and the role of advocacy in global surgical care. SURG 510 has been offered since 2009 and is a core course for the Graduate Certificate in Global Surgical Care.

**SURG 512 (3): Global Disability: A Surgical Care Mandate.** Students will critique current models addressing the fact that globally; one billion people live with a disability of whom 80% live in resource-limited settings which further compounds the family and public burden. Discussion focuses on frameworks for advocacy and alleviating the global burden of surgical disability. SURG 512 has been offered since 2012 and is a core course for the Graduate Certificate in Global Surgical Care.

**SURG 514 (3): Surgical Care in Humanitarian Disaster Response.** Students will examine the current status of global activity by national and international responders to both natural and conflict-related humanitarian disasters with particular emphasis on the role of surgical care. SURG 514 has been offered since 2014 and is a core course for the Graduate Certificate in Global Surgical Care.

**SPPH 540 (3): Program Planning and Evaluation.** Students will become literate and functionally competent in program planning and evaluation, a key aspect to international surgical work. The course involves developing a program plan and an evaluation proposal for a public health program, particularly as it relates to global surgical care initiatives. SPPH 540 is a core course for the Graduate Certificate in Global Surgical Care.

**SPPH 517 (3): Clinical Research methods for Surgical Procedures.** Students will examine how approaches for surgical research differ compared to medical research. They will learn many aspects of the research process from grant writing and proposal development, to applying for ethics, data analysis and statistical methods used in surgical research. They will become literate in systematic reviews, quality improvement and assurance, as well as technology evaluation in surgical research. SPPH 517 is currently a course requirement for Masters in Population and Public Health, and a key course for surgical trainees in the program.

**SURG 518 (3): Surgical Care in Canada's Rural and Remote Indigenous Communities with Global Comparisons.** Students will critique the current and historical provision of surgical care services to indigenous communities in Canada and globally. They will draw on indigenous voices to examine challenges and opportunities confronting both the clinician and the service delivery system, embracing lessons learned from these communities. The course will promote critical thinking on, and ultimately will improve the provision of surgical care services to indigenous communities in Canada and abroad.

**SURG 542 (3): Directed Study in Global Surgical Care.** Students will carry out an exhaustive search of the world literature, on a global surgical care topic. Topics will be chosen by the student in the specialty discipline in consultation with a faculty advisor to support in-depth learning of the current state of knowledge in that topic and to explore knowledge deficits that need to be addressed. This course will promote knowledge acquisition and critical thinking for the student and contribute significantly to the education of peers and to UBC's Global Surgical Care knowledge repository.

**SURG 560 (6): Global Surgical Care Field Practicum.** Students will complete an on-site field placement "grounding" their knowledge and skills attained in the other courses of the program. It will enable students to synthesize the knowledge gained from the coursework, transfer their knowledge to one aspect of International Surgical Care practice, and demonstrate achievement of the Masters program learning objectives. A high level written report will be the main evaluated component and could well provide the basis for a publication or for a major conference presentation.

**Electives (3):** Students will submit electives for approval to the Program Director.

#### **7.4 New Course Development: Faculty Contributors**

##### **SURG 560: Global Surgical Care Field Practicum:**

Dr. David Fairholm, MD, Dip Med Ed, FRCSC (*Course Lead*)  
Clinical Professor, Dept. of Surgery, (Neurosurgery), UBC

Dr. Flora Fang-Hwa Teng, MD, MPH, FRCSC  
Clinical Instructor, Dept. of Surgery, (Obstetrics and Gynecology), UBC

Dr. Geoffrey L. Blair, MD, FRCSC  
Director, Undergraduate Surgical Education, Clinical Professor, Dept. of Surgery, (Pediatric), UBC

**SURG 542: Directed Study in Global Surgical Care:**

Dr. Brian Westerberg, MD, MHSc, FRCSC (*Course Lead*)  
Clinical Professor, Dept. of Surgery (Otology & Neurotology), UBC

**SURG 518: Surgical Care in Canada's Indigenous Communities with Global Comparisons:**

Dr. Robert H. Taylor, C.M., MD, MIH, DipTM, FRCSC (*Course Lead*)  
Clinical Professor, Dept. of Surgery (General Surgery), UBC

Dr. Jane Lea, BSc, MD, FRCSC  
Clinical Assistant Professor, Dept. of Surgery (Otolaryngology), UBC

Dr. Nadine R. Caron, MD, MPH, FRCSC (*Content Review*)  
Associate Professor, UBC Northern Medical Program Co-Director, UBC Centre for  
Excellence in Indigenous Health

## 8. Appendix B: New Course Supporting Documents

### 8.1 SURG 542: Sample Learning Contract Template

#### Branch for International Surgical Care: SURG 542 Learning Contract

**Project Title:**

**Term Dates (Course Start & End Dates):**

**Student:**

**Student #:**

**Email:**

**Phone:**

**Directed Study Faculty Advisor:**

**UBC Faculty/Department/Division:**

**Email:**

**Phone:**

**Purpose:** *A general statement of the student's goals/purposes/research question*

**Objectives:** *A statement of the specific objectives/learning outcomes to be accomplished by the student upon completion of the contract*

**Learning activities/plan (i.e. reading list, relevant literature):** *A description of learning activities to be completed by the student and resources identified*

**Responsibilities:** *A list of the responsibilities for the Faculty Advisor and the student*

Student:

Directed Study Faculty Advisor:

**Assignments:** *Outline number of assignments, due dates & weighting of each*

1. \_\_\_\_\_ 2. \_\_\_\_\_

4. \_\_\_\_\_ 3. \_\_\_\_\_

**Signatures:**

Student: \_\_\_\_\_

Faculty Advisor: \_\_\_\_\_

Course Director: \_\_\_\_\_

Date: \_\_\_\_\_

## 8.2 SURG 560: Sample Practicum Agreement

### BRANCH FOR INTERNATIONAL SURGICAL CARE

Practicum Candidate:	Phone:	Email:
Field Supervisor:	Phone:	Email:
Address of practicum site:		
BISC Practicum Course Lead:	Phone:	Email:
Dates of Practicum:		
Mailing Address of Practicum Site:		

### Brief Description of the Practicum

The candidate will complete at least 4 weeks at the “on site location” proposed to be from *DATE* to *DATE*. The Practicum placement will be with the *NAME OF ONSITE INSTITUTION*. *DESCRIBE AS APPROPRIATE CHARACTERISTICS OF THE SPECIALIZED PRACTICUM THAT WILL BE PROVIDED AT THIS SITE*. Overall supervision will be provided by the BISC Course Lead (*NAME*) and the onsite Supervisor (*NAME OF SUPERVISOR*).

### Objectives of the Practicum

*THE FOLLOWING OBJECTIVES ARE DEFINED....*

- 
- 

Additional details of the goals, objectives, primary supervisor and method for Assessment is provided in the Practicum Project Plan document which accompanies this agreement.

### Terms of the Practicum Agreement

As a candidate of the Branch for International Surgical Care Practicum Program at the University of British Columbia, *the Candidate NAME* will complete a Practicum experience with *NAME OF SITE* on the following terms:

- 

#### Dates of “onsite” practicum

### Administration

The Practicum Candidate works under the administrative control of \_\_\_\_\_ NAME OF INSTITUTION

The Practicum Candidates’ BISC Course Lead is: \_\_\_\_\_ NAME

The Practicum Candidate’s on site supervisor is: \_\_\_\_\_ NAME

### Practicum Activities

The Practicum Candidate will work on site from *DATE* to *DATE*. The Candidate will be involved [[in six primary activities (consultation, Project Plan preparation, on site activities, report writing and related activities, evaluation of practicum and assessment of performance and written report). INDIVIDUALIZE THESE]]. The Candidate will keep a log describing weekly activities and supervision experiences.

The primary Practicum activities will include: THESE ARE EXAMPLES, INDIVIDUALIZE AS NEEDED

- 
- 
- 

### Supervision

The candidate \_\_\_\_\_ NAME will assume responsibility for preparation and approval of the Practicum agreement and plan, and will fulfill the terms of the Practicum plan as agreed to by all parties: the Practicum Candidate; \_\_\_\_\_ NAME the Field Supervisor; \_\_\_\_\_ NAME and University BISC Course Lead \_\_\_\_\_ NAME.

The Field Supervisors will assume responsibility for supervision and assessment of the Practicum Candidate.

The Field Supervisors will provide a written assessment of the Candidates performance and these will be submitted to the BISC Practicum Coordinator at the end of the Practicum.

The BISC Practicum Coordinator will oversee activities of the Candidate and the Field Supervisor. The BISC Practicum Coordinator will be involved in the formulation of the Practicum plan, in the negotiation of the supervisory agreements, and in the assessment of the Practicum student's performance. The Practicum Coordinator will have regular (approximately monthly) contact with the Practicum candidate to review progress on goals, objectives and activities. This may be accomplished by telephone, email, Skype or face-to-face.

### Assessment

The Field Supervisor will provide the Coordinator with (a) a written assessment of the Practicum Candidate's performance. On the basis of the information received from the Field Supervisor and the score achieved on the written report, the BISC Coordinator will determine and recommend a Pass/Fail mark for the Practicum to the Certificate Program at the University of British Columbia by \_\_\_\_\_ DATE.

Practicum candidate: \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_

Field Supervisor: \_\_\_\_\_

BISC Coordinator: \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_



## COMPUTER SCIENCE

**Category: (1)**

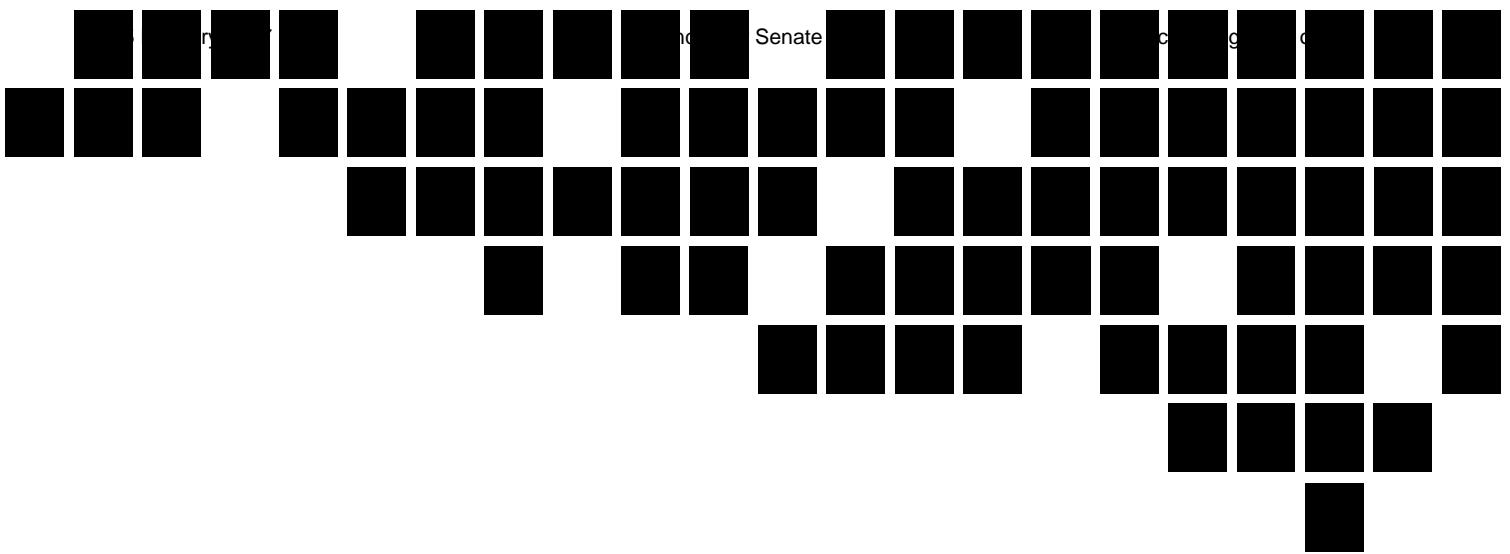
<b>Faculty:</b> Science <b>Department:</b> Computer Science <b>Faculty Approval Date:</b> November 2, 2016	<b>Date:</b> November 2, 2016 <b>Contact Person:</b> Norm Hutchinson <b>Phone:</b> 604-822-8818 <b>Email:</b> norm@cs.ubc.ca
<b>Effective Date for Change:</b> 17S <b>Proposed Calendar Entry:</b>  CPSC 513 (3) <b>Introduction to Formal Verification and Analysis</b>  This course is not eligible for Credit/D/Fail grading.	<b>Present Calendar Entry:</b>  CPSC 513 (3) <del>Integrated Systems Design</del>  This course is not eligible for Credit/D/Fail grading.  <b>Action:</b> Rename the course  <b>Rationale:</b> CPSC 513 is a course on formal verification. It was first introduced with an emphasis on mixed hardware-software designs, hence the “integrated” part of the name. The course has evolved with the discipline and continues to explore the underlying theory, algorithms, and applications of formal methods. The course no longer has an emphasis on mixed hardware-software designs. Thus, the old name no longer describes the current course.  <b>Supporting Documents:</b> SCI-16-1-CPSC 513



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Land and Food Systems <b>Department:</b> Applied Biology <b>Faculty Approval Date:</b> Oct 31/16 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2017	<b>Date:</b> September 26, 2016 <b>Contact Person:</b> David Fraser <b>Phone:</b> 822-2040 <b>Email:</b> david.fraser@ubc.ca
<b>Proposed Calendar Entry:</b>  <b>APBI 319 Aquaculture and the Environment</b>  Interactions between aquaculture and the environment. Current issues, comparison of systems, species, production methods, environments, and socioeconomics.  Prerequisites. Either third year standing and at least one of BIOL 230, APBI 260, APBI 265, CONS 330, ENVR 200, ENVR 300; or permission of the instructor.	<b>URL:</b>  <b>Present Calendar Entry:</b>  <b>Type of Action:</b> New Course  <b>Rationale for Proposed Change:</b> An Aquaculture and the Environment course is currently taught as part of APBI 490 (Topics in Applied Biology). However, the popularity of this version outstrips that of other special topics options, and justifies the creation of a permanent, stand-alone course on the subject which will improve visibility. Creating it as a third year course will help create a flow of students into existing fourth-year aquaculture courses.



BRITISH COLUMBIA  
INSTITUTE OF TECHNOLOGY



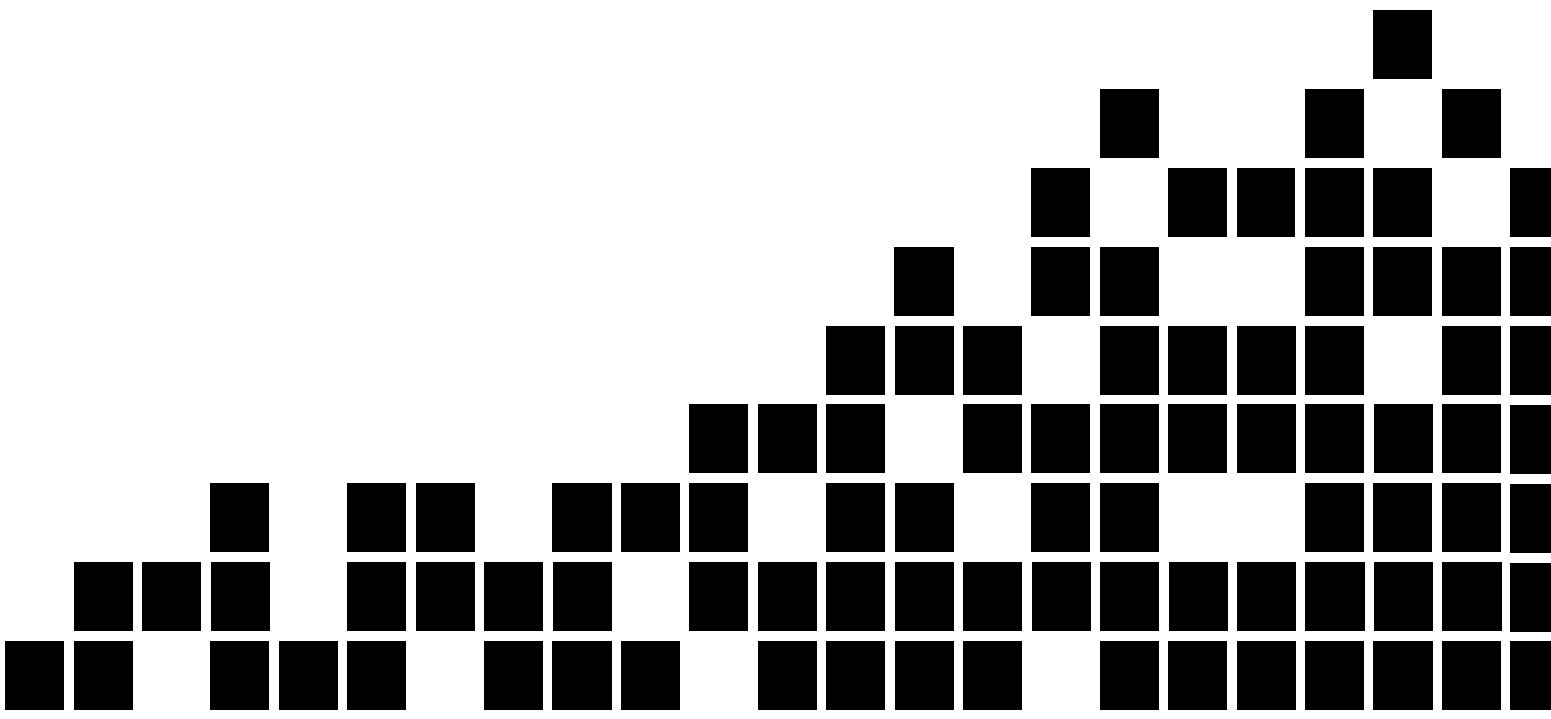
THE  
UNIVERSITY OF  
BRITISH  
COLUMBIA

Proposal

*for a*

Bachelor of Science (Combined Honours)  
in Biochemistry and Forensic Science

*18 October 2016*



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# 1 Executive Summary

## 1.1 Institute Overviews

Established in 1964, the British Columbia Institute of Technology (BCIT) is one of British Columbia's largest post-secondary institutions. The Institute offers a wide range of credentials in the trades and technologies, including certificates, diplomas and undergraduate and graduate degrees. It has five campuses in Greater Vancouver and numerous satellite locations around B.C. BCIT's annual enrolment is approximately 15,500 full-time students and 32,500 part-time students. The Institute graduates about 5,000 students a year from approximately 400 different programs.

The University of British Columbia is a comprehensive research-intensive university, consistently ranked among the 40 best universities in the world. It creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world. Since 1915, UBC's West Coast spirit has embraced innovation and challenged the status quo. Its entrepreneurial perspective encourages students, staff and faculty to challenge convention, lead discovery and explore new ways of learning. UBC's annual enrolment is approximately 49,000 undergraduate students and 10,500 graduate students. The university employs approximately 14,000 faculty and staff.

### 1.1.1 Our Mission

As one of the world's leading universities, the University of British Columbia creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world.

UBC is committed to the three following core mandates:

- [Student Learning](#) – UBC provides the opportunity for transformative student learning through outstanding teaching and research enriched educational experiences, and rewarding campus life.
- [Research Excellence](#) – UBC creates and advances knowledge and understanding, and improves the quality of life through the discovery, dissemination, and application of research within and across disciplines.
- [Community Engagement](#) – UBC serves and engages society to enhance economic, social, and cultural well-being.

In addition to those three core mandates, UBC is also committed to the following: [Aboriginal Engagement](#), [Alumni Engagement](#), [Intercultural Understanding](#), [International Engagement](#), [Outstanding Work Environment](#), [Sustainability](#)

The mission of this joint B.Sc. (Combined Honours) is to combine the strengths of UBC and BCIT to provide our students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science and to provide students with job ready skills and abilities to become the future leaders of the forensic science and biochemistry industries.

## **1.2 Proposed Credential**

BCIT and UBC are proposing to offer a joint Bachelor of Science (B.Sc.) degree with Combined Honours in Biochemistry and Forensic Science.

## **1.3 Location**

The program will be based at BCIT's Burnaby and Downtown campuses and UBC's Vancouver Point Grey campus.

## **1.4 Name of School**

The degree will be awarded by the School of Computing and Academic Studies at BCIT and the Department of Biochemistry and Molecular Biology through the Faculty of Science at UBC.

## **1.5 Anticipated Program Start Date**

The anticipated start date of the program is September 2017.

## **1.6 Anticipated Completion Time**

Full-time students can expect to complete the Bachelor (Combined Honours) degree in four years. Students will enter into the program after completing first-year UBC Science and will spend three years in the program.

## **1.7 Summary of Proposed Program**

### **1.7.1 Aims and Goals**

The mission of this joint B.Sc. (Combined Honours) is to combine the strengths of UBC and BCIT to provide our students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science and to provide students with job ready skills and abilities to become the future leaders of the forensic science and biochemistry industries.

Graduates will be proficient at working in a laboratory setting and will have gained important critical-thinking and analytical skills. In addition, graduates will have conducted both academic and applied research, conducted forensic testing, and will be able to communicate their results effectively. Graduates will also have gained knowledge of the accredited laboratory environment, which will help expand their employability beyond accredited forensic laboratories.



Upon completion of this credential, graduates will have the skills, knowledge, and ability to:

- Demonstrate a comprehensive understanding of biochemistry, molecular biology, chemistry, and forensic science, including the main principles, techniques, and latest developments.
- Perform with confidence a variety of laboratory procedures relevant to biochemistry, molecular biology, chemistry, and forensic science including the ability to operate analytical instruments.
- Apply and maintain quality assurance processes and safety standards in a scientific laboratory.
- Design and conduct research independently and in a team environment.
- Communicate complex scientific information and evidentiary findings in oral and written formats for academic or legal purposes.
- Apply critical-thinking, analytical, and problem-solving skills to the disciplines of biochemistry, molecular biology, chemistry, and forensic science.
- Demonstrate the communication and interpersonal skills needed to work effectively in a team environment.
- Develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science.
- Exemplify the highest ethical standards and professional principles.

### **1.7.2 Strategic Contribution**

The proposed degree supports the BCIT and UBC strategic plans in the following areas:

- It is a truly interdisciplinary program involving two specializations from two exceptional institutions.
- It produces job-ready graduates for the expanding global science and forensic science industries.
- It improves the abilities of graduates to be immediately productive in industry by combining a strong foundational science understanding with an applied training in forensic science.
- It advances the state of practice of forensic science in Canada by training future leaders in this industry.
- It will be an industry-recognized, transferable credential to other universities (i.e. graduate, professional programs, etc).

In addition the proposed collaborative degree aligns well with the objectives of the Government of British Columbia's Post-Secondary Institution Core Review of Programing, including the following quote from the Terms of Reference Letter:

“Consider opportunities to collaborate with other public post-secondary institutions to minimize program overlap and duplication and improve outcomes for students and the public.”

### 1.7.3 Curriculum Linkages

To graduate with a Bachelor of Science (Combined Honours) in Biochemistry and Forensic Science, students will need to complete a total of 132 credits between years 1 and 4. Students enter into the program after completing year 1 in Science (usually 34 credits) at UBC, or equivalent. (Students taking first-year science courses at other institutions will be able to apply for entrance into UBC Science, transfer their courses to UBC, and then apply to this program.) After entering the program the students will complete a total of 98 credits in years 2 to 4 comprised of 31 courses which build on the core science content the students gain in their first year at UBC. Students will partake in curriculum in the following areas:

- Natural Science
- Specialized Science
- Biochemistry
- Forensic Science
- Communications and Management
- Quality Assurance
- Research

The curriculum in the first four areas (Natural Science, Specialized Science, Biochemistry and Forensic Science) was developed to enable the program to meet the educational requirements of FEPAC (Forensic Science Education Programs Accreditation Commission: <http://fepac-edu.org/>), which was established by the American Academy of Forensic Sciences. Students will take the Natural Science and Specialized Science courses primarily in years 1 and 2 at UBC and proceed to take Forensic Science courses at BCIT and Biochemistry courses at UBC in years 3 and 4. After completing year 3 students may wish to enter into the optional 15-month work opportunity provided by the UBC Science Co-op office, to apply their comprehensive knowledge and laboratory skills in a workplace environment (program goals 1 and 2), apply quality assurance processes and safety standards (program goal 3), apply critical-thinking, analytical and problem-solving skills (program goal 6), and exemplify the highest ethical and professional standards (program goal 9). In addition, students entering into this optional co-op program will gain valuable experience in applying for jobs and participating in interviews.

This joint Bachelor of Science (Combined Honours) program will provide students with experience in designing and conducting research individually or in a team environment, while working in a biochemistry research lab during their Honours Thesis course. Alternatively, students may choose to take an Advanced Biochemical Techniques laboratory course and another advanced Biochemistry elective to meet their research course requirement. BCIT staff and Forensic DNA Laboratory may be utilized in collaboration with the Biochemistry researchers in order to conduct a forensic themed Honours Thesis.

This collaborative degree will incorporate a variety of teaching approaches. Students will learn through case-based learning, group work, and problem-based learning, in which they consider real-life examples and challenges experienced by current forensic scientists. In addition, because a number of courses are either laboratory-based or have a laboratory component, students will gain valuable, hands-on experience and technical competence in biochemistry and forensic science. The curriculum is well linked to the program goals, with the Forensic Science courses at BCIT meeting between four and all nine of the program goals, and the third and fourth year courses at UBC meeting between two and all nine of the program goals (see Appendix 2: Program goals integration).

#### **1.7.4 Potential Employment Opportunities and Student Demand**

Forensic science is the application of a variety of different scientific disciplines to the law. As such, forensic scientists can specialize in a wide variety of forensic disciplines at various levels of government or within private organizations. Biochemists study chemical processes within living organisms and, like forensic science, biochemistry involves a variety of disciplines.

Graduates of this program will have the advantage of a solid science foundation and advanced training in forensic science (including a number of courses focused on forensic biology/DNA), biochemistry and molecular biology that will lead to multiple career paths including the following employment and further education:

- Government (Federal, Provincial, Municipal) – graduates could work as civilians in government laboratories, in such positions as forensic scientist, analyst, or technologist in the areas of forensic biology/DNA, evidence recovery, quality assurance, forensic chemistry, and toxicology, among others. Graduates could also work in other areas of life science, as a police officer, coroner, or crime scene investigator, etc.
- Private laboratory – graduates could work in a private forensic laboratory either in Canada or internationally, or as scientists or quality assurance personnel within a testing or calibration laboratory, or in other areas pertaining to the life sciences such as biotechnology or pharmaceutical companies.
- Advanced Education – graduates could combine this training with further graduate education in biochemistry, molecular biology, forensic science, or any other life science (and possibly continue into academia). Graduates could apply to various professional faculties: medicine (including continuing on into forensic pathology), law, dentistry (including continuing on into forensic odontology), pharmacy, nursing, medical laboratory sciences, public health, medical administration, journalism, or an MBA program.

All current UBC Biochemistry students (approximately 300 students from year 2 to year 4) were sent a survey to gauge their level of interest in forensic science and this proposed joint B.Sc. (Combined Honours) degree in Biochemistry and Forensic Science. Seventy-one current Biochemistry students answered the survey. Of those that answered the survey the majority responded that they were either very interested or interested in the field of forensics (49 of 71; 69%). In addition, the majority (48 of 69; 70%) indicated that they would have been either extremely interested or interested in enrolling in this joint

B.Sc. (Combined Honours) program after they had completed their first year of university. For more information, see the Needs Assessment Report (Appendix 7).

### **1.7.5 Proposed Delivery Methods**

The majority of classes in this proposed program would be face-to-face delivery, with some classes delivered either entirely online or in a blended format (classroom and online components). Of the classroom-delivered courses, a number of them at both UBC and BCIT are either laboratory-based or have a laboratory component, as per the Forensic Science Education Programs Accreditation Commission (FEPAC) requirements (see section 5.4). Students will be taking courses at both the UBC Vancouver Point Grey campus and BCIT's Burnaby and Downtown campuses.

### **1.7.6 Program Strengths**

The Bachelor of Science (Combined Honours) in Biochemistry and Forensic Science has the following areas of strength: The program

- is truly interdisciplinary by involving two world class institutions and specializations. The curriculum will include courses in core science and a broad exposure in biochemistry, forensic science, chemistry and molecular biology. This proposed program is also perfectly positioned as the only Forensic Science Bachelor of Science degree offered in Western Canada.
- will streamline the educational process, allowing graduates to enter the workforce sooner than our current educational pathway. The current BCIT forensics program frequently accepts B.Sc. graduates that then go on to complete our Bachelor of Technology or Advanced Certificate in Forensic Investigation. This current educational pathway (typically 6 to 8 years) delays an individual's career progression, compared to the proposed four-year joint degree.
- will provide students with a variety of learning experiences. Students will learn from UBC professors with a wealth of teaching and research experience and from industry-based BCIT instructors who are currently subject matter experts working in the field of forensic science.
- will have an applied research component. Students will conduct independent and group research projects in their courses, including an Honours Thesis research course or an Advanced Biochemical Techniques laboratory course and an optional co-op program.
- will allow students to gain a wealth of hands-on laboratory skills in both forensic science and biochemistry and, through BCIT's "state-of-the-art" laboratories, be able to operate industry standard analytical instruments (including those used in forensic DNA and forensic chemistry/toxicology). Students in the Honours Thesis research course will gain practical experience in a biochemistry research laboratory.

- will emphasize technical communication skills including the ability to understand and communicate academic and forensic topics, produce forensic reports, and testify in a court of law.
- will provide students with numerous advanced education opportunities such as into a master's or PhD program in Forensic Science, Biochemistry or any other life science program or at professional schools such as Law, Medicine, Dentistry, or Pharmacy.

### **1.7.7 Institutional, Regulatory or Professional Support and Recognition**

Both the University of British Columbia and the British Columbia Institute of Technology have been extremely supportive in our efforts to develop this credential. This includes support at UBC from the Faculty of Science and the Faculty of Medicine. At BCIT, this proposal is supported by the Department of Forensic Science and Technology, the School of Computing and Academic Studies, and the Registrar's office. In addition, the Centre for Forensic Research at Simon Fraser University has expressed support for the proposed program and would provide a possible advanced education opportunity.

Strong support for the proposed program has also been received from the forensic science industry, including the Washington State Patrol Forensic Laboratory Services Bureau, Orchid Pro-DNA (a private forensic DNA laboratory), Maxxam (a private company with a forensic DNA and a forensic equine drug laboratories), and the BC Coroners Service, among others (see Appendix 4, Correspondence and Related Documents).

In addition, after this program is developed and has graduated two classes, the program will apply for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC: <http://www.aafs.org/fepac>), which was established by the American Academy of Forensic Sciences. This accreditation will assure potential students and employers that this joint BCIT-UBC degree is providing a high-level forensic science education that will produce top-quality forensic science graduates. Through personal communication, Nancy J. Jackson, Director of Development and Accreditation for FEPAC, has confirmed that this joint degree involving two institutions will qualify for accreditation, provided all of the curriculum standards are met.

### **1.7.8 Admission Requirements**

The primary target audience is elite-level students who have a strong science foundation and would like to specialize in the exciting fields of forensic science, biochemistry, and molecular biology. Students will enter the Honours program in the second year, after completing certain required courses in the first-year science program at UBC. Students attending other institutions and taking first-year science courses will be able to apply for entrance into UBC Science, transfer their courses to UBC, and then apply to this program. Students will need a minimum average of 70% to enter the program. However given the limited seats in this Honours program (15 seats), the actual cut-off is anticipated to be higher and will vary from year to year.

Applicants are required to complete at least 30 credits of first-year science at UBC (or equivalent university courses through approved transfer to first-year science at UBC), including the following:

- 8 credits of UBC Chemistry 121 (or CHEM 111) and Chemistry 123
- 3 credits of 100-level UBC English. English 112 is recommended. (or 3 credits of SCIE 113)
- 5 credits of UBC Biology 121 and Biology 140
- 3 (or 4) credits of UBC Differential Calculus
- 3 (or 4) credits of UBC Integral Calculus
- A minimum grade point average of 70% (with the actual cut-off possibly being higher given the limited number of seats)

In addition students are required to take Physics 101, 118, and 119 and 3 additional credits of 100-level UBC English to graduate with this degree but these courses are not entrance requirements. Students can decide if they want to take these courses in first year with the other required courses (i.e. 34 credits total) or complete these courses in a summer term after being accepted into the program.

#### **1.7.9 Transfer Arrangements**

Students attending other institutions and taking first-year science courses will be able to apply for entrance into UBC Science, transfer their first-year courses to UBC, and then apply to this program. UBC will handle eligibility and evaluation of transfer courses. There are no other transfer arrangements for this program. As this program is an Honours program, UBC requires Honours students to have at least 30 credits each year (Fall and Winter terms), fail no courses, and maintain a minimum GPA (76% average for this proposed program). Students that do not meet all of these requirements are removed from the Combined Honours program. In this situation the student can then apply their UBC credits to another degree at UBC (including a major in Biochemistry) and also apply their BCIT credits to either an Advanced Certificate or Bachelor of Technology with the BCIT Forensic Science and Technology department. At UBC's discretion, some BCIT course credits may also be counted towards another specialization within the UBC B.Sc.

#### **1.7.10 Related Programs**

The BCIT Forensic Science and Technology department currently offers both a Bachelor of Technology and an Advanced Certificate in Forensic Investigation (Forensic Science Option). As these credentials have recently undergone a formal program review, we expect they will continue to meet the needs as a general investigative credential for non-scientists or individuals that already have a Bachelor of Science degree in a non-forensic discipline.

Currently only five institutions offer a Bachelor of Science degree in Forensic Science in Canada, with all of them located in Ontario. Our unique proposed program will combine the strengths of two world-class, post-secondary institutions, including the strong scientific theoretical education and research excellence from UBC and the applied, industry-focused learning from BCIT. This proposed program would be perfectly positioned as the only Forensic Science Bachelor of Science degree offered in Western Canada. In addition, our proposed program would be different from other Canadian forensic science programs because of the education and training that students gain in the form of two specializations (Biochemistry and Forensic Science), the significant number of upper level biochemistry and biology courses (potentially including a biochemistry Honours Thesis course), and the fact that the BCIT instructors come directly from the forensic industry with numerous years of work experience. In addition, the BCIT Forensics department operates a Forensic DNA Laboratory which is in the process of obtaining laboratory accreditation which will be useful for applied training opportunities, the Quality Assurance course, and forensic related Honours Thesis projects. For more information, see Appendix 7, Needs Assessment (3.2 Labour Supply).

The UBC Department of Biochemistry and Molecular biology currently offers Bachelor of Science (B.Sc.) degrees with specializations in Major biochemistry, Honours Biochemistry, and Combined Honours in Biochemistry and Chemistry. It also offers Masters (M.Sc.) and doctorates (Ph.D.) in Biochemistry. The department will continue to offer the Bachelor of Science degrees with the specializations listed above.

## 1.8 Institute Contact Person

UBC: Please contact Dr. Leonard Foster, Department Head, Biochemistry and molecular Biology (604-822-8311 or [foster@chibi.ubc.ca](mailto:foster@chibi.ubc.ca)) or Ian Cavers, Associate Dean of Science, Academic (604-822-5090 or [cavers@science.ubc.ca](mailto:cavers@science.ubc.ca)).

BCIT: Please contact Dean Hildebrand, Associate Dean, Computing, Science and Technology (604-451-6867 or [Dean\\_Hildebrand@bcit.ca](mailto:Dean_Hildebrand@bcit.ca)) or Steve Eccles, Dean of School of Computing and Academic Studies (604-432-8920 or [Steve\\_Eccles@bcit.ca](mailto:Steve_Eccles@bcit.ca)) for further information about this program.

## 2 Degree Level Standard

The proposed Bachelor of Science (Combined Honours) in Biochemistry and Forensic Science has been developed to graduate students with a combination of theoretical knowledge and applied skills who will excel in industry or in further advanced education. The curriculum content is carefully designed to satisfy both BCIT and UBC's bachelor degree standards. The BCIT Credential Standards incorporate the degree level standards defined by the BC Ministry of Advanced Education: <http://www.aved.gov.bc.ca/degree-authorization/public/degree-program-criteria.htm>

As this proposed program will apply for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC), the program has been designed to meet the curriculum requirements of FEPAC, with a comprehensive number of courses that include natural science core courses, specialized science courses, forensic science courses, and additional advanced courses (see section 5.4 for more details).

### 2.1 Depth and Breadth of Knowledge

Students entering this program will have gained a wide range of scientific knowledge and methodology from the standard first-year science courses at UBC. More specifically, the students will have taken two courses in the principles of chemistry (which have laboratory components) and courses in biology covering topics that include genetics, evolution, and ecology (with a laboratory component). After entering this program in second year, these students will take numerous chemistry, biology, and biochemistry courses at UBC. The first-year prerequisite courses along with the second-year courses will provide a strong science foundation for the students and will satisfy the natural science and specialized science course requirements specified in the FEPAC standards.

The forensic science courses that they will take later in the program will draw upon these foundational concepts. Furthermore, these students will gain an understanding of how the forensic science discipline intersects with the natural sciences. In second year, the BCIT course, FSCT 7320, Introduction to Forensic Science, will introduce numerous disciplines within the area of forensic science, allowing students to expand their breadth of knowledge of the field, as well as allow them to meet others in the same program. A similar process will happen in BIOC203, where students will be introduced to the core concepts of biochemistry and molecular biology and meet other students who are in the various biochemistry specializations. In years 3 and 4 the students will take numerous forensic science courses at BCIT and advanced biochemistry courses at UBC, satisfying the forensic science and advanced specialization course requirements specified in the FEPAC standards.

Throughout their education, students will be able to demonstrate critical-thinking and analytical skills to solve problems in biochemistry and forensic science. In fourth year, the students will either take the biochemistry Honours Thesis course or an Advanced Biochemical Techniques laboratory course with a second advanced Biochemistry elective. No matter which option students choose, they will be able to engage in research, write reports, conduct presentations, and solve difficult and challenging questions using the knowledge gained from previous courses.



## 2.2 Knowledge of Methodologies and Research

This proposed program will provide students with excellent opportunities to gain knowledge of forensic science and biochemistry methodologies, by providing students with practical hands-on applied learning. The forensic science courses are taught by forensic experts either currently employed as faculty at BCIT and/or in industry. The Forensic Science and Technology Department uses modern forensic DNA analysis, forensic chemistry, forensic photography, and crime scene equipment and technologies used in the field. Many of the courses are set up to follow the logical progression of real forensic cases. For example, the initial forensic DNA theory course (FSCT 8150) has a module for each step of the process that provides students with the theoretical knowledge they need, and then shows them the practical application of that knowledge. This is followed by the forensic DNA applications course (FSCT 8160) which provides students with applied learning opportunities by having them process a mock case from evidence searching to the production of and interpretation of a DNA profile.

Students will have opportunities to develop their research skills including a literature review, laboratory skills, and written and oral presentations. Both the forensic DNA courses at BCIT (FSCT 8150 and FSCT 8160) have opportunities for students to research the scientific literature and present their findings in either a discussion forum or as a group project. In the BCIT FSCT 7910, Research Methodology and Measurement Models course, the students will learn the theory of inquiry and investigative enquiry, as well as data analysis, methodologies of measurement models, and reporting of results.

At UBC, students in the third and fourth years will develop their laboratory research and presentation skills. In the BIOC 301, Biochemistry Laboratory course, students will conduct an ongoing research project and stand-alone research experiments, tour other research labs, participate in small group discussions of peer-reviewed articles, and present a research article. In the BIOC 449, Honours Thesis course, students will conduct an independent research project within a faculty's research laboratory and present a final written thesis and oral presentation. These research skills will prepare graduates for a future in an academic research laboratory, a biotechnology company, or a government or private forensic laboratory. The BIOC 420, Advanced Biochemical Techniques course will provide students with a look into a career in research, including experience in conducting and troubleshooting independent research projects, and experience with a number of important biochemistry laboratory techniques.

In addition, one of the goals for this program is to ensure graduates develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science. One of the ways that this program develops lifelong learners is by giving the students the knowledge, laboratory and research skills to be successful in their career of choice. The second way the program develops lifelong learning skills is by providing the students with numerous opportunities to apply their knowledge in the biochemistry and forensic science laboratories, and by our instructors sharing their passion for the specialization with their students.

## 2.3 Application of Knowledge

Application of knowledge to areas of forensic science and biochemistry is a very important aspect of this program. Students will develop a comprehensive understanding of biochemistry, molecular biology, chemistry, and forensic science, including the main principles, techniques, and latest developments. They will then be given opportunities to apply critical-thinking and problem-solving skills in selecting the appropriate procedure and equipment necessary to achieve their desired outcomes.

For example, in the forensic DNA courses at BCIT the students will search for, identify, and recover relevant biological evidence and select the appropriate test to determine the source of the biological evidence (e.g., blood, semen, or saliva). During the courses on law and expert witness testimony, the students will learn about all aspects of the court process, what qualifies someone as an expert witness, and the appropriate methods of giving testimony. The students will then get to apply their knowledge by giving their own testimony in a mock case. The biochemistry laboratory and directed studies courses will allow the students to apply the knowledge that they learned in their other biochemistry courses in conducting research experiments and projects.

## 2.4 Communication Skills

At UBC the students will gain knowledge of the latest research questions and methodologies in the field of biochemistry and will have the opportunity to apply that knowledge in either their Honours Thesis course or Advanced Biochemical Techniques laboratory course. Both of these options will require students to review scholarly articles, complete hands-on laboratory work, give presentations, and write reports and/or a thesis. Combining solid science fundamentals with understanding of the current challenges of forensic investigations will also prepare these students to be future leaders in the field of forensic science. These professionals will have the ability to offer strategic direction to the discipline in the future.

Forensic scientists require unique skill sets. They operate in two environments: the professional laboratory/professional setting (requiring highly technical report writing and communication skills) and the legal setting (requiring conversion of technical concepts to written and oral forms so that judges, lawyers and jurors can understand them). Throughout their education, students will develop effective communication skills, as both written and oral components are built into the forensic science and biochemistry courses. In addition, students in this proposed program will take English courses at UBC and liberal studies and communications courses at BCIT. The BCIT communications course will be a new course developed specifically for forensic scientists and will teach technical communications including report writing, presentation skills, and workplace communication (emails, memos, CVs, cover letters, etc.). During the expert testimony course, students will have to convey technical forensic terms and techniques in a clear and concise manner so that a jury of lay individuals will understand them. In addition, during their Honours Thesis research projects or during the Advanced Biochemical Techniques laboratory course, students will write either a thesis or a number of reports and will gain experience in presenting their research findings.

## 2.5 Awareness of Limits of Knowledge

The US National Research Council (NRC) report titled “Strengthening Forensic Science in the United States: A Path Forward” (2009a) highlighted the fact that many forensic science disciplines need further research to validate their scientific principles and evaluate the degree of uncertainty present in the discipline. The forensic scientist’s ability to recognize this degree of uncertainty and the limits of their analysis is crucial and will be addressed in this educational program. Requisite competencies of a forensic expert include thinking critically, an appreciation of the importance of evidence-based decision making, techniques built upon thorough quality assurance principles, and confidence in one’s area of expertise. Graduates of this proposed program will also be expected to have a solid understanding of their limits of knowledge in the areas of forensic science and biochemistry. They will gain further awareness of their limits of knowledge through an appreciation of applied research and validation interwoven throughout the program. Students will learn to explore, discover and mitigate where possible the levels of uncertainty in the current challenges faced by forensic investigators, with a goal of advancing the field and improving the criminal justice system.

## 2.6 Professional Capacity/Autonomy

In addition to being aware of the limits of analysis, the US National Research Council (NRC 2009a) report also stressed the fact that “much research is needed not only to evaluate the reliability and accuracy of current forensic methods and develop them further” (NRC 2009b) and that in some cases forensic evidence may be important to reduce the list of possible suspects but may not be able to identify a single individual. Recently (2012) there was a multidisciplinary report inspired by the NRC report titled “Forensic Science in Canada” that evaluated the current state of forensic science in Canada. Recommendations from this report included the need for the Canadian government to increase research funding in forensics, the need for educational institutions to develop forensic research programs, more training for forensic identification officers and scientists, and further education in report writing, courtroom testimony, and quality assurance (Forensic Science in Canada, 2012).

Aligned with an appreciation of one’s professional limits of knowledge, a forensic expert is also expected to operate with a “duty of care.” Forensic experts must ensure that they do not extend themselves beyond their professional expertise and in an unethical manner while conducting laboratory testing, writing reports, and giving testimony. As such, the program will stress the importance of ethical standards and professional principles throughout the curriculum. Students will also take the BCIT Applied Ethics course, which will help them to make ethical and professional decisions and expose them to professional codes of conduct. Students will work effectively in both individual and team environments to complete course projects and conduct research in an academic or research laboratory environment.

### 3 Credential Recognition and Nomenclature

The proposed degree's program goals were developed using multiple resources and in consultation with BCIT's Department of Forensic Sciences and Technology. First we determined which knowledge and skills would be necessary for individuals to work in the areas of forensic science and biochemistry. Next the program goals were developed to integrate these knowledge and skills.

The first resource used for developing the program goals was the US-based O\*NET OnLine report (2013) for Forensic Science Technicians: <http://www.onetonline.org/link/summary/19-4092.00>. This report details the tasks, tools and technology, knowledge, skills, abilities, work activities, education required, work styles, work values, and wages and employment trends. This report was generated by surveying and compiling the responses of 8 to 33 employed forensic science technicians in the United States. The second resource used for developing the program goals was a report by the US Bureau of Labour Statistics (2010) describing the Forensic Science Technician career, including duties, work environment, education, and important qualities. The final set of resources used to develop the program goals were 11 job descriptions from a range of forensic science employers in Canada (including the RCMP Forensic Laboratory, the Ontario Centre of Forensic Sciences, and a private lab, MAXXAM Analytics), for a variety of forensic disciplines (including forensic biology/DNA, toxicology, firearms analysis, forensic identification, and quality assurance) and at a variety of levels (including technologist, technician, analyst, scientist, specialist, coordinator, technical manager, and assistant section head).

During the industry surveys we asked our participants to review our knowledge and skills and determine if they felt that they were necessary for individuals to work in their area of expertise (we surveyed both forensic science experts and individuals working in biochemistry, biotechnology, chemistry and environmental laboratories). Table 1 describes the percentage of individuals that said that the knowledge and skills were either "essential," "very useful" or "somewhat useful" for both the forensic science industry (N=41) and all respondents (Overall, N=62).

**Table 1: Feedback from Industry Survey about Knowledge and Skills**

Knowledge and Skills	Forensic Science Industry	Overall
Ethics and professionalism	100%	100%
Criminal/civil laws process	92.5%	75.4%
Giving expert witness testimony	92.7%	70.9%
Technical laboratory skills	78.0%	80.6%
General investigative techniques	90.0%	86.9%

<b>Knowledge and Skills</b>	<b>Forensic Science Industry</b>	<b>Overall</b>
Communication skills (verbal and written reports)	100%	100%
Interpersonal skills	100%	100%
Ability to work in teams	95.1%	96.8%
Analyze and think critically	100%	100%
Ability to plan and organize	100%	100%
Problem solving skills	100%	100%
Understanding of laboratory quality assurance processes	85.4%	88.7%
Ability to conduct research or validation studies	80.6%	82.3%

The results from this question indicate that the knowledge and skills we expect our graduates to obtain are considered necessary to work in the areas of forensic science and other biochemistry related fields. Following this question we presented our proposed program goals to both groups of survey participants and asked them to rate how important those graduate competencies would be to work in their areas of expertise. Table 2 describes the percentage of individuals that rated the program goals as either “essential,” “very useful” or “somewhat useful” for both the forensic science industry (N=41) and all respondents (Overall, N=62). Overall, both the forensic science industry and other related science industries felt that the program goals were sufficiently clear and will be recognized by industry.

**Table 2: Feedback from Industry Survey about Program Goals**

<b>Program Goals</b>	<b>Forensic Science Industry</b>	<b>Overall</b>
Develop a comprehensive understanding of biochemistry, molecular biology, and forensic science, including the main principles, techniques, and latest developments.	85.2%	72.8%
Perform with confidence a variety of laboratory procedures relevant to biochemistry, molecular biology, and forensic science including the ability to operate analytical instruments.	70.2%	72.4%

<b>Program Goals</b>	<b>Forensic Science Industry</b>	<b>Overall</b>
Apply and maintain quality assurance processes and safety standards in a scientific laboratory.	81.6%	84.8%
Design and conduct academic research individually and in a team environment.	83.8%	74.2%
Communicate complex scientific information and evidence in oral and written formats for academic or legal purposes.	89.5%	81%
Apply critical-thinking, analytical, and problem-solving skills to the disciplines of biochemistry, molecular biology, and forensic science.	91.8%	82.8%
Demonstrate the communication and interpersonal skills needed to work effectively in a team environment.	97.2%	96.6%
Develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science.	97.4%	93.3%
Exemplify the highest ethical standards and professional principles.	97.4%	96.6%

† Some program goals have had minor revisions since the Industry Survey.

The name of the proposed credential, Bachelor of Science (Combined Honours) in Biochemistry and Forensic Science was chosen to represent the two major specializations in which students will gain experience. Feedback from the forensic science industry (industry interviews, survey results, and consultation) indicated that forensic science programs should specialize in an area of forensic science rather than provide a program that is too broad and where the students never gain a specialization. For this reason we have provided a number of essential courses for the students in this program to become experts in forensic biology/DNA, and provided advanced biochemistry courses that would be extremely beneficial to a forensic DNA expert. In benchmarking this program against others in Eastern Canada, we see that the majority of programs are a Bachelor of Science with Honours or with an Honours Option. While some of these programs are general forensic science degrees, a number of the institutions offer a double specialization in forensic science with another science discipline (see Benchmarking section 5.6.2).

While many of the BCIT Advanced Certificate and Bachelor of Technology graduates aspire to careers in public and private industry, the RCMP Forensic Laboratory, the largest public employer of forensic scientists in Canada, currently requires its employees to have a two- or three-year science-related diploma for the Technologist positions and a Bachelor of Science for the Specialist positions. Although the science areas sought after vary depending on the position and the discipline, they do include a “Forensic Science related” B.Sc. Unfortunately the Bachelor of Technology graduates have traditionally

not qualified. BCIT graduates have still been successful in gaining employment in the RCMP labs but only because a number of them entered with a Bachelor of Science to begin with. For that reason we are developing this joint Combined Honours Bachelor of Science degree with the BCIT department of Forensic Science and Technology to strengthen credential recognition with employers, including the RCMP. While graduates of this program will take a number of courses in the area of forensic biology/DNA, they could potentially be employed in other areas of forensic science or the broader field of forensic investigation. This proposed degree would meet the minimum academic requirements for the following positions within the RCMP Forensic Laboratory Services (2010) (<http://www.rcmp-grc.gc.ca/fsis-ssji/care-carr-aca-uni-eng.htm>):

- Specialist, Biology Services (search and analysis functions)
- Technologist, Biology Services (search and analysis functions)
- General Duty Technologist, Biology Services (search, analysis and reporting functions)
- Technologist, National DNA Data Bank (analysis functions)
- General Duty Technologist, National DNA Data Bank
- Technologist, Chemistry and Explosives
- Technologist or Specialist, Firearms
- Specialist, Toxicology Services
- Technologist, Toxicology Services

This proposed Bachelor of Science (Combined Honours) degree would also allow graduates to more easily transfer their credential to graduate programs in forensic science or another science discipline in Canada, the United States, or internationally as compared to the current Bachelor of Technology (BTech). If this new degree is developed, BCIT would continue to offer the BTech degree and Advanced Certificate (AC) credentials, because students that currently have a Bachelor of Science degree from another institution need an avenue to obtain the essential forensics training to increase their chances of employment in industry. Students that choose this pathway and are interested in employment with the RCMP would still meet the RCMP Forensic Laboratory's B.Sc. requirement. In addition, many other employers in the forensic investigation field recognize the BTech and AC, as per our recent program review industry survey results.

After the proposed program is developed and graduates two classes, the department will apply for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC). FEPAC Accreditation Standards (2013) (<http://fepac-edu.org/sites/default/files/pdf/FEPAC%20Standards%2007302013.pdf>) include many details related to program administration and curriculum requirements. These curriculum requirements (courses and topics) are quite extensive and shaped the design of our program map. In addition, this commission only accredits Bachelor of Science and Master of Science degrees in either forensic science or a natural science with a concentration in forensic science. Additional details about the FEPAC curriculum standards can be found in Section 5.4 (Course and Curriculum Requirements).

During the needs assessment of the proposed program we further consulted with numerous forensic industry experts from the areas of forensic DNA, forensic toxicology, and quality assurance. These individuals provided input that we have used during our program development. Two of these individuals, one from the RCMP Forensic Laboratory Service and one from the Ontario Centre of Forensic Sciences, conducted our industry interview as well.

In addition to conducting interviews about this proposed program, many of the forensic science experts from private and public organizations have provided letters of support for the proposed program, including the following stakeholders (see Appendix 4):

- Dr. Roger Brownsey, Program Head, Department of Biochemistry and Molecular Biology at University of British Columbia
- Gary Shutler, DNA Technical Leader/Manager, Forensic Laboratory Services Bureau, Washington State Patrol and previous member of the Scientific Working Group for DNA Analysis Methods (SWGDM)
- Amarjit Chahal, Forensic Specialist and Technical Leader, Orchid PRO-DNA
- Sandrine Merette, Laboratory Supervisor, Forensic Equine Drug Testing Department, Maxxam
- Lisa Lapointe, Chief Coroner of the British Columbia Coroners Service and the Chair of the Program Advisory Committee for the Forensic Science and Technology Department
- Gail Anderson and Hugo Cardoso, Co-Directors, Centre for Forensic Research, Simon Fraser University
- Lynne Bell, Professor at SFU School of Criminology
- Nancy Jackson, Director of Development and Accreditation, American Academy of Forensic Sciences

Both BCIT and UBC seek to optimize the success of students that are accepted into programs, and is open to recognizing and providing an opportunity for advanced placement within a program based upon transfer credits. BCIT's Admissions policy (<http://www.bcit.ca/files/pdf/policies/5003.pdf>), and Admission Procedures ([http://www.bcit.ca/files/pdf/policies/5003\\_pr1.pdf](http://www.bcit.ca/files/pdf/policies/5003_pr1.pdf)) are included in Appendix 12. UBC's Admissions policy and Admissions procedures can be found at <http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=2,13,0,0> and <http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=2,27,0,0> respectively.

Both UBC and BCIT have a links to the BCCAT transfer guide and have identified transfer articulations for all BC institutions.



## 4 Partnering Institution Profiles

### 4.1 Mission and Mandate for Partnering Institution

BCIT:

BCIT exists to serve the success of learners and employers:

- BCIT is an institute of higher education that exists to serve the citizens of British Columbia and its partners around the world, and to educate and train graduates who are career-ready, who are immediately productive in their chosen workplace, and who are ongoing assets to their employers.
- BCIT is an institution of inclusion. We strive to make the benefits of a BCIT education available to all who come to the institute prepared to meet our high standards. We educate, support, and care about our students and strive to graduate as many as possible.
- BCIT credentials are highly valued by business and industry. Our graduates receive a superior return on their investment in a BCIT education.
- BCIT exists to create the right kinds, quality, and quantities of skilled employees in professions that are in demand and can support a decent standard of living.
- The BCIT model of education focuses on launching and advancing careers, on the broad availability of its programs, and on the provision of education and training that can be accessed in an efficient amount of time.

The mission of this joint B.Sc. (Combined Honours) is to combine the strengths of UBC and BCIT to provide our students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science and to provide students with job ready skills and abilities to become the future leaders of the forensic science and biochemistry industries.

BCIT's foundation is comprised of certificates, diplomas and both undergraduate and graduate degrees: the entry-to-practice credentials that lead to rewarding careers. These are enhanced by programs and courses that are aligned with career development and growth, and include industry services, advanced studies and continuing education.

BCIT offers experiential and contextual teaching and learning with interdisciplinary experiences that model the evolving work environment.

BCIT conducts applied research to enhance the learner experience and advance the state-of-practice.

BCIT exercises its provincial mandate and priorities as well as its internationalization initiatives by collaborating globally with post-secondary systems and employers in activities that improve learner access and success.

UBC:

The following is the vision of UBC:

As one of the world's leading universities, the University of British Columbia creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world.

UBC is committed to the three following core mandates:

- [Student Learning](#) – UBC provides the opportunity for transformative student learning through outstanding teaching and research enriched educational experiences, and rewarding campus life.
- [Research Excellence](#) – UBC creates and advances knowledge and understanding, and improves the quality of life through the discovery, dissemination, and application of research within and across disciplines.
- [Community Engagement](#) – UBC serves and engages society to enhance economic, social, and cultural well-being.

In addition to those three core mandates, UBC is also committed to the following: [Aboriginal Engagement, Alumni Engagement, Intercultural Understanding, International Engagement, Outstanding Work Environment, Sustainability](#)

The development of this proposed program addresses numerous objectives from UBC's strategic plan (Place and Promise: The UBC Plan, 2012) in the following areas:

Student Learning Commitment:

- *Expand educational enrichment opportunities, including research, a first year small class experience, international learning, community service learning, and co-op/practicum/internship opportunities (Goal 3)* – this proposed program will increase the educational opportunities for students by allowing them to experience courses at both UBC and BCIT, have opportunities for a co-op experience, and gain valuable experience during the Honours Thesis research course. In addition, the majority of courses that students will take at BCIT provide a small class experience with extensive interaction with forensic science instructors.

Research Excellence Commitment:

- *Increase the quality and impact of UBC's research and scholarship (Goal 1)* – this proposed program will involve a research thesis option where students will be able to engage in research activities in the latest areas of biochemistry and forensic science in collaboration with BCIT's forensic science instructors and BCIT's Forensic DNA Laboratory. For example, forensic DNA typing research has been expanding globally and this technology is currently being used to

identify individuals who have been victims of mass disasters, war crimes, and human trafficking.

Community Engagement Commitment:

- *Be a leader in fostering social, cultural and economic well-being through lifelong learning and engagement with students, faculty, staff, alumni and the wider community (Goal 2)* – one of the goals of the proposed program is to ensure that the students will develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science. In addition, we expect that graduates of this proposed program will benefit the social and economic well-being of this province by becoming the future leaders of forensic science and biochemistry.

International Engagement Commitment:

- *Strengthen UBC's presence as a globally influential university (Goal 2)* including the Action *Increase the number of substantial strategic partnerships in regions of priority to UBC* – this proposed program will increase UBC's national and international presence through a partnership with BCIT that will produce job-ready graduates that can compete for jobs globally in the area of forensic science.

## 4.2 Rationale for Partnership

While many BCIT graduates aspire to careers in public and private industry, the RCMP Forensic Laboratory, the largest public employer of forensic scientists in Canada, currently requires its employees to have a minimum of a Bachelor of Science degree and, unfortunately, the Bachelor of Technology does not qualify. For that reason we are proposing this joint Combined Honours Bachelor of Science degree with BCIT to strengthen the credential recognition by future employers, including the RCMP. This proposed Bachelor of Science degree, being more broadly recognized than a BTech, would also allow graduates to more easily transfer their credential to a graduate program in forensic science or another science discipline in Canada, the United States, or internationally.

After the program is developed we will apply for accreditation with the Forensic Education and Programs Accreditation Commission (FEPAC). In order to be successful we need to meet their education standards, which include numerous natural science core courses and specialized science courses in first and second year. A number of these core and specialized science courses are not available at BCIT and to develop them would simply overlap what is already being offered at a very high quality at UBC.

We have received excellent feedback from the forensic science industry while conducting the needs assessment for this program. The industry has expressed the importance of graduates of this proposed program having a strong core science understanding upon which an applied education in forensic science can be built. The 30 credits of third and fourth year Biochemistry and Biology courses will help the graduates to gain employment within a forensic specialization (i.e., a biochemistry and forensic science education is tailor-made for a student to enter into a forensic biology/DNA position). In addition, these advanced courses

in biochemistry and biology will also help graduates to excel in their career as forensic scientists after they gain employment. This program will benefit greatly from UBC's excellent core science courses in the first and second year, combined with the excellent reputation of the UBC Biochemistry personnel who will provide the more advanced third and fourth year biochemistry courses. These strengths that UBC will contribute to this joint degree will be well supported by the strengths of BCIT Forensic Science and Technology department, namely BCIT's ability to provide hands-on applied education in forensic science using advanced technologies and taught by subject matter experts. The curriculum and expertise provided by both departments in this program will ensure that both BCIT and UBC are viewed as equitable partners in delivering this joint Bachelor of Science (Combined Honours) degree.

This program stands out from other forensic science Bachelor of Science programs in that graduates will have 30 credits of biochemistry and biology in the third and fourth years, which is more than in any of the other Bachelor of Science in Forensic Science programs from competing institutions in Ontario. In addition, these UBC courses are taught by faculty within the Biochemistry and Molecular Biology department at UBC who are active researchers in their fields. By partnering with UBC, students in this program will have the opportunity to conduct research for an Honours Thesis at UBC, which will provide them with valuable research skills and laboratory experience that may give them an advantage in gaining employment over graduates that do not have an Honours Thesis, and allow them to remain competitive with graduates of programs that do have Honours Thesis options (three of the five B.Sc. Forensic Science programs do have a thesis option).

### 4.3 Programming Scope of Partners

BCIT is comprised of 6 schools including the School of Computing and Academic Studies (<http://www.bcit.ca/cas/>). Within the School of Computing and Academic Studies are 9 departments, including the department of Forensic Science and Technology. Numerous types of master degrees, bachelor degrees, diplomas and certificates are available to students at the undergraduate level at BCIT. Within the Forensic Science department, students can currently graduate with a Bachelor of Technology degree or an Advanced Certificate with options in Computer Crime, Crime and Intelligence Analysis, or Forensic Science. In addition, there is a Forensic Health Sciences option which offers an Advanced Certificate.

UBC is comprised of 25 faculties, colleges and schools including the Faculty of Science (<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,0,0,0>). Within the Faculty of Science are 27 departments including the Department of Biochemistry and Molecular Biology. Numerous types of bachelor degrees, diplomas and certificates are available to students at the undergraduate level at UBC (B.Sc., BA, BAsC, etc.). Within the Biochemistry and Molecular Biology department, students can currently graduate with a Major in Biochemistry (120 credits), a Combined Majors in Biochemistry and Chemistry (120 credits), an Honours in Biochemistry (132 credits), a Combined Honours in Biochemistry and Chemistry (132 credits), or a Minor in Biochemistry (18 credits).

At the graduate level, 45 different types of masters and doctoral degrees are offered under the Faculty of Graduate and Postdoctoral Studies (<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,348,0>), including a Master of Science in Biochemistry and a Doctor of Philosophy in Biochemistry.

## 4.4 Other Existing Agreements between the Partnering Institutions

Currently three programs have agreements between BCIT and UBC, with two offering joint credentials. The Technology Teacher Education (TTED) is a diploma program where the student enters BCIT after the first year of post-secondary courses (30 credits), completes a two-year technology diploma at BCIT, and then goes to UBC in the fourth year to conduct teacher education studies. This program is designed to allow graduates to teach technology in BC's Middle and High School system (<http://www.bcit.ca/study/programs/605ddipma#overview>).

The BCIT School of Health Sciences offers a joint Bachelor of Science (Combined Honours) in Biotechnology in collaboration with the Department of Microbiology and Immunology. Students enter BCIT after taking first-year Science at UBC (30 credits), complete two years at BCIT, and then take three terms at UBC (42 credits). In addition, this program has a mandatory co-op program, which makes this program a five-year degree (<http://www.bcit.ca/study/programs/8910bsc>).

The Centre for Digital Media offers a Master of Digital Media that is a joint credential offered by UBC, SFU, Emily Carr University of Art and Design (ECUAD), and BCIT. The program takes 16 months, has an internship, and involves faculty and staff from all four institutions (<http://thecdm.ca/>).

## 4.5 Institution(s) Awarding the Credential

The credential will be awarded jointly by the Department of Forensic Science and Technology in the School of Computing and Academic Studies at BCIT and the Department of Biochemistry and Molecular Biology through the Faculty of Science at UBC. Graduates of this proposed program will be able to attend both institutions' convocation ceremonies and the degree that students will receive will list both BCIT and UBC. The transcript issued will list both institutions and state that the student was in the joint Bachelor of Science (Combined Honours) program in Biochemistry and Forensic Science.

## 4.6 Partnership Framework

### 4.6.1 Roles and Responsibilities of each Partner Institution

Based on meetings that have involving both departments and representatives from student service areas from both institutions, we have developed the roles and responsibilities for BCIT and UBC to deliver this joint B.Sc. degree in Biochemistry and Forensic Science. A table listing this roles and responsibilities is listed in a table in Appendix 8 (Shared Resources and Facilities).

### 4.6.2 Academic Standards

Evaluation of learning outcomes and expectations are set by each instructor and provided to students along with expectations of satisfactory achievement levels. The UBC grading

practices are further detailed at the following Academic Calendar link: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,42,0,0>.

As this program is an Honours program, students would need to maintain a minimum of a 76% average over the winter session (September to April), complete a minimum of 30 credits over the winter session, and have no course failures. The UBC Honours requirement can be found at the following

link: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,404>. In addition students at UBC are also evaluated on their overall performance, referred to as Academic Standing, which is described in the following links for

UBC: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,236,0,0> and, for the faculty of

Science: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,1459>.

The UBC policy of Senate Appeals on Academic Standing can be found in the UBC Calendar at the following

link: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,53,0,0>. Links to these UBC policies are also included in Appendix 12.

#### 4.6.3 Curriculum Advisory Activities at Partner Institution(s)

To ensure the ongoing currency of the new program and the quality of its learning outcomes, UBC and BCIT must provide evidence that the program review and assessment procedure is in place.

##### **BCIT format review and assessment:**

BCIT and UBC are committed to developing and maintaining high quality educational programs and to the ongoing renewal of those programs. BCIT systematically reviews and assesses its programs for quality, currency, and relevance to stakeholder needs. Most programs will be on a five-year cycle for program review. The Forensic Science and Technology department has recently completed a program review (2013-14) of its Bachelor of Technology and Advanced Certificate programs with favourable results and support. Data from the program reviews has not only been used in developing this proposed program but has also shown the need for this proposed program. The procedure for reviewing and assessing the proposed program is documented in BCIT's Program Review Policy 5402 (<http://www.bcit.ca/files/pdf/policies/5402.pdf>) and Program Review Procedure 5402 ([http://www.bcit.ca/files/pdf/policies/5402\\_pr1.pdf](http://www.bcit.ca/files/pdf/policies/5402_pr1.pdf)). Briefly, the process involves:

- An internal self-study report written by the program area, incorporating data, analysis, and resulting recommendations
- An external review including a site visit, to validate the findings of the self-study report
- A final report, incorporating input from the external review team
- An institutional response, by way of a presentation of final recommendations and action plan to Education Council

- A one-year status update at Education Council, presenting on the status of implementing the recommendations.

**Internal Review:**

BCIT's program review policies will facilitate the formative and summative review of this program every five years to ensure the quality and currency of the new program's learning outcomes. Staff from both BCIT and UBC comprising the program's School Working Group will be involved in the program review and curriculum review of this program.

**External review:**

BCIT's Board of Governors establishes a Program Advisory Committee (PAC) for each academic program. The program will receive advice and input from the PAC, which is constituted to provide strategic advice and assistance to the program and provide guidance to enable the program to meet projected future needs of employers. The PAC involvement ensures that changing skills, abilities, and knowledge required by employers are reflected in the program. The PAC also provides input and guidance in the conduct of program reviews and endorses by motion the results of a program review.

Membership in the PAC comprises an appropriate cross-section of representation from employers, alumni, the professions, and other industry representatives. Meetings are scheduled no less than twice a year.

Each PAC submits a written annual report to the Board of Governors outlining major accomplishments and recommendations for program improvement, as well as an annual self-evaluation of the PAC's effectiveness and utility. For more details about PACs, see BCIT Policy 5404 (<http://www.bcit.ca/files/pdf/policies/5404.pdf>).

We will establish a program steering committee with members from UBC and BCIT to ensure that the curriculum in the program continues to reflect the future directions of BCIT and UBC and stays up-to-date with the requirements of the biochemistry and forensic science industries. In addition to curriculum review, the steering committee will have additional administrative responsibilities including:

- Overseeing the application process and advising prospective students on the details of programs and the admission process.
- Reviewing student progress in the program
- Implementing and enforcing the regulations, procedures, and policies related to studies at BCIT and UBC.
- Coordinating marketing for both institutions

The BCIT department of Forensic Science and Technology is free to make necessary changes to their curriculum as required, but will keep the UBC department of Biochemistry and Molecular Biology updated through the program steering committee. In addition, the UBC Biochemistry and Molecular Biology department will consult with BCIT to ensure that any proposed curriculum changes will not negatively impact the future application to FEPAC for accreditation of the program.

In addition to the program steering committee, there will be a Program Coordinator for the program at BCIT who will work directly with a faculty appointed program champion at UBC to ensure the program runs smoothly.

#### **UBC format review and assessment:**

UBC is committed to maintaining a high standard of educational quality in their departments and courses. As such, courses in the Biochemistry and Molecular Biology department are constantly being updated with the latest research developments. To achieve this, the course chairs hold annual meetings to discuss and update course content. In addition, the Biochemistry and Molecular Biology department holds regular academic reviews which include an external review. The major goal of an academic review of a department is to provide the department with an opportunity to reflect on its programs, operations and performance, and obtain external advice to guide continuing improvement of academic and operational quality. External reviews are generally conducted every five years for departments at UBC and involve an analysis of the scholarly activity, professional activities, academic units, planning, and resource allocation.

We will establish a program steering committee with members from UBC and BCIT to ensure that the curriculum in the program continues to reflect the future directions of BCIT and UBC and stays up-to-date with the requirements of the biochemistry and forensic science industries. In addition to curriculum review, the steering committee will have additional administrative responsibilities including:

- Overseeing the application process and advising prospective students on the details of programs and the admission process.
- Reviewing student progress in the program
- Implementing and enforcing the regulations, procedures, and policies related to studies at BCIT and UBC.
- Coordinating marketing for both institutions

The UBC Biochemistry and Molecular Biology department is free to make necessary changes to their curriculum as required, but will keep the BCIT Forensic Science and Technology department updated through the program steering committee. In addition, the UBC Biochemistry and Molecular Biology department will consult with BCIT to ensure that any proposed curriculum changes will not negatively impact the future application to FEPAC for accreditation of the program. In addition to the program steering committee, there will be a Program Coordinator for the program at BCIT who will work directly with a faculty appointed program champion at UBC to ensure the program runs smoothly.

## **4.7 Partner Institution(s) Contact Information**

BCIT: Please contact Dean Hildebrand, Associate Dean, Computing, Science and Technology (604-451-6867 or [Dean\\_Hildebrand@bcit.ca](mailto:Dean_Hildebrand@bcit.ca)) or Jason Moore, Instructor, Department Forensic Science and Technology (604-454-2269 or [Jason\\_Moore@bcit.ca](mailto:Jason_Moore@bcit.ca)) for further information about this program.



UBC: Please contact Leonard Foster, Department Head, Biochemistry and Molecular Biology (604 822-8311 or [foster@chibi.ubc.ca](mailto:foster@chibi.ubc.ca)) or Warren Williams, Senior Instructor, Department of Biochemistry and Molecular Biology (604 822 8729 or [wwarren@mail.ubc.ca](mailto:wwarren@mail.ubc.ca)) for further information about this program.

## 5 Curriculum and Program Content

### 5.1 Program Aim

The mission of this joint B.Sc. (Combined Honours) is to combine the strengths of UBC and BCIT to provide our students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science and to provide students with job ready skills and abilities to become future leaders in the forensic science and biochemistry industries. Graduates will be proficient at working in a laboratory setting and will have gained important critical-thinking and analytical skills. Graduates will be able to conduct both academic research and forensic testing and be able to communicate their results effectively. Graduates will also be introduced to the unique requirements of operating in an accredited laboratory environment, giving them experience that will expand their employability beyond accredited forensic laboratories.

### 5.2 Program Goals

Upon completion of the Bachelor of Science with Combined Honours in Biochemistry and Forensic Science degree, graduates will have the skills, knowledge, and ability to work effectively in the fields of biochemistry, molecular biology, chemistry and forensic science. Specifically, our graduates will be able to do the following:

- Demonstrate a comprehensive understanding of biochemistry, molecular biology, chemistry, and forensic science, including the main principles, techniques, and latest developments.
- Perform with confidence a variety of laboratory procedures relevant to biochemistry, molecular biology, chemistry, and forensic science including the ability to operate analytical instruments.
- Apply and maintain quality assurance processes and safety standards in a scientific laboratory.
- Design and conduct research independently and in a team environment.
- Communicate complex scientific information and evidentiary findings in oral and written formats for academic or legal purposes.
- Apply critical-thinking, analytical, and problem-solving skills to the disciplines of biochemistry, molecular biology, chemistry, and forensic science.
- Demonstrate the communication and interpersonal skills needed to work effectively in a team environment.
- Develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science.
- Exemplify the highest ethical standards and professional principles.

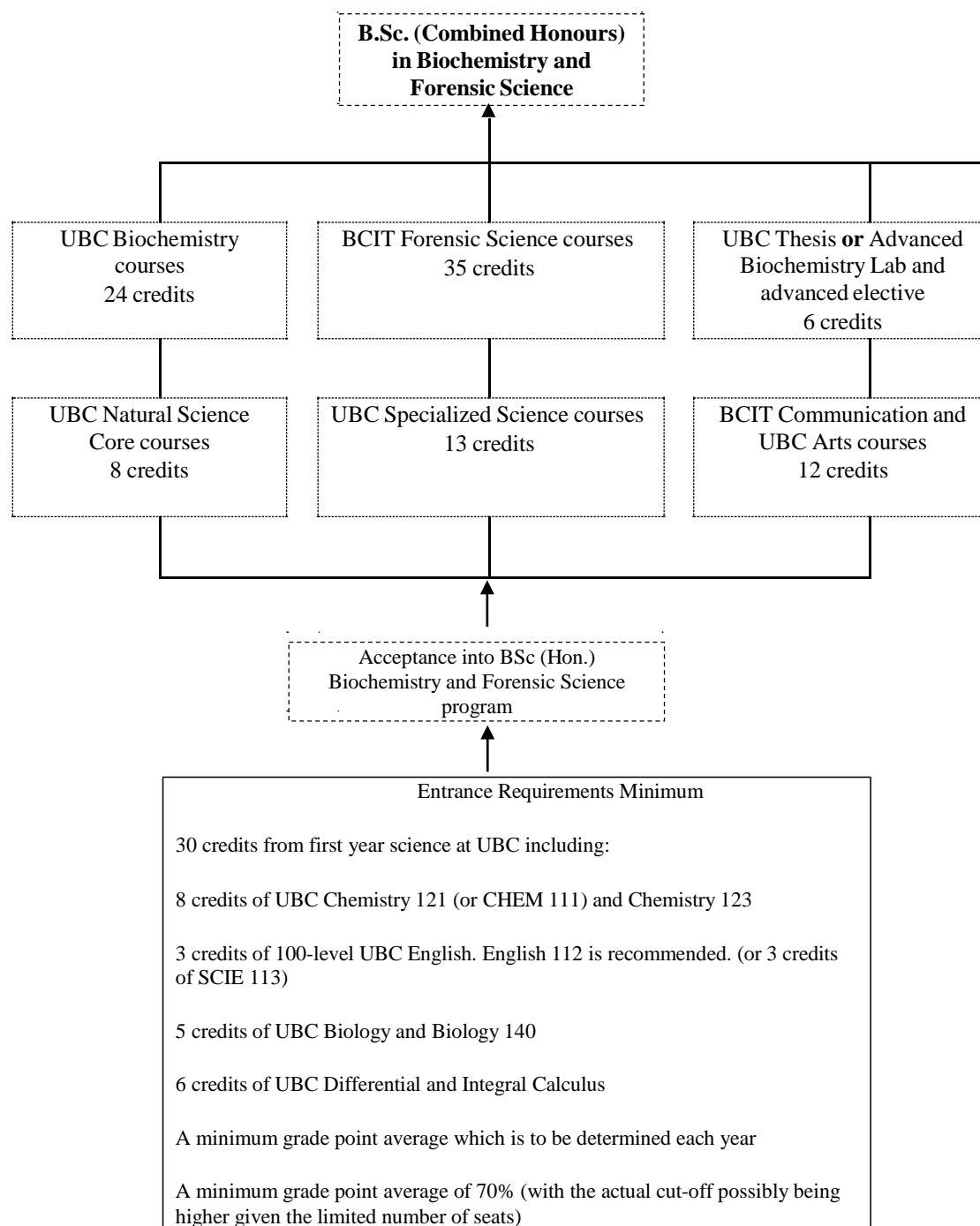
### 5.3 Program Structure and Length

The proposed four-year Bachelor of Science Degree will have a total of 132 credits, with the Combined Honours program beginning in the second year. Students take their first-year Science at UBC then apply to this program prior to starting their second year. In years 2 to 4, students take 98 credits (31 courses) at UBC and BCIT. Students will need to complete one of two research course options in their fourth year, to develop their ability to conduct theoretical and applied research, as well as further develop their presentation skills:

- a UBC biochemistry Honours Thesis course (6 credits)
- an Advanced Biochemical Techniques laboratory course (3 credits) plus one advanced Biochemistry elective (3 credits)

The design of this four-year program expedites the educational process, allowing graduates to enter the workforce sooner than with our current educational pathway. For example, it is common for B.Sc. graduates to enter a BCIT forensics program to combine their core science education with specialty training in forensics. However, this current educational pathway can take six years or more to complete and significantly delays a person's career progression, compared to the proposed four-year joint degree with UBC.

### Program Structure Map for Biochemistry and Forensic Science



Note: Physics 101, 118, and 119 and 3 credits of 100-level English (10 credits total) are graduation requirements listed in the first year of the program map but are not entrance requirements (see Appendix 1: Program map).

The program is structured so that the students complete core natural science courses in first year (as prerequisites to this program), then continue to take more specialized science courses in second year, to build a very strong science education base upon which to build a more advanced education in forensic science and biochemistry in the third and fourth years. In second year, two introductory courses (FSCT 7320, Introduction to Forensic Science and BIOC 203, Fundamentals of Biochemistry) prepare students well for their forensic science and biochemistry courses that will make up the majority of their third and fourth years. In addition, the Introduction to Forensic Science course will provide the students with an opportunity to meet and connect with other students in this program for the first time and learn about the various disciplines in forensic science from guest presenters. The third-year biochemistry courses and the BCIT communications and research methodology courses will help the students design and conduct research projects, analyze data, and write either a thesis or research reports, depending on which research course option they choose in fourth year. In addition, if they decide to enroll in the optional 16-month co-op, these writing, research and data analysis skills will help students in their work environment.

## 5.4 Courses and Curriculum Requirements

The aim of this proposed Combined Honours program is to meet the needs of the biochemistry and forensic science industries by graduating students who have a very strong core science education and background along with an applied knowledge of the specializations of biochemistry and forensic science.

The development of this proposed program addresses numerous objectives from UBC's strategic plan (Place and Promise: The UBC Plan, 2012) in the following areas:

### Student Learning Commitment:

- *Expand educational enrichment opportunities, including research, a first year small class experience, international learning, community service learning, and co-op/practicum/internship opportunities (Goal 3)* – this proposed program will increase the educational opportunities for students by allowing them to experience courses at both UBC and BCIT, have opportunities for a co-op experience, and gain valuable experience during the Honours Thesis research course. In addition, the majority of courses that students will take at BCIT provide a small class experience with extensive interaction with forensic science instructors.

### Research Excellence Commitment:

- *Increase the quality and impact of UBC's research and scholarship (Goal 1)* – this proposed program will involve a research thesis option where students will be able to engage in research activities in the latest areas of biochemistry and forensic science in collaboration with BCIT's forensic science instructors and BCIT's Forensic DNA Laboratory. For example, forensic DNA typing research has been expanding globally and this technology is currently being used to

identify individuals who have been victims of mass disasters, war crimes, and human trafficking.

Community Engagement Commitment:

- *Be a leader in fostering social, cultural and economic well-being through lifelong learning and engagement with students, faculty, staff, alumni and the wider community (Goal 2)* – one of the goals of the proposed program is to ensure that the students will develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science. In addition, we expect that graduates of this proposed program will benefit the social and economic well-being of this province by becoming the future leaders of forensic science and biochemistry.

International Engagement Commitment:

- *Strengthen UBC's presence as a globally influential university (Goal 2)* including the Action *Increase the number of substantial strategic partnerships in regions of priority to UBC* – this proposed program will increase UBC's national and international presence through a partnership with BCIT that will produce job-ready graduates that can compete for jobs globally in the area of forensic science.

As this proposed program plans to apply for FEPAC accreditation, the program will need to meet FEPAC curriculum requirements by including certain courses to meet the requirement that:

*“An undergraduate forensic science program shall provide a basic foundation in the scientific and laboratory problem-solving skills necessary for success in a modern forensic laboratory. Such a program shall combine rigorous scientific and laboratory training with exposure to the breadth of forensic science disciplines, including forensic science practice, law enforcement, and ethics.”*  
(FEPAC Accreditation Standard, 2013, pg. 7)

The FEPAC Accreditation Standard also describes the minimum credit and laboratory requirements for natural science core courses (biology, physics, chemistry, and differential and integral calculus), at least 12 credits of specialized science courses (including biochemistry, cell biology, genetics, and analytical chemistry as options), at least 15 credits of forensic science (covering courtroom testimony, law, quality assurance, ethics, evidence recovery and processing, etc.), of which at least 9 of those 15 credits need to include lab work (covering forensic biology, chemistry, microscopy, etc.) and, finally, at least 19 credits of advanced additional courses in the student's area of specialization (biochemistry and forensic science). The current program map was designed to align with FEPAC's curriculum requirements (see Appendix 1: Program Map). In addition, the courses and curriculum were selected to achieve our program goals. We ensured that the learning objectives of courses were well integrated with the overall program

goals. Each of the program goals is incorporated into multiple courses in the program map (see Appendix 2: Program Goals Integration Matrix).

Graduates of this program will have obtained numerous employability skills (see Appendix 6: Employability Skills Matrix) from the forensic science and biochemistry courses in this program. It is important to point out that many of the employability skills that graduates will develop match the knowledge and skills that our forensic science and other science industry partners determined were essential or very important during the industry survey (see section 3, Credential Recognition and Nomenclature). Graduates of this program will have great depth and breadth of skills and knowledge that will allow them to find employment in forensic science, biochemistry, or other areas of life science, or continue on to further education in a variety of areas (see section 1.7.4, Potential Employment Opportunities and Student Demand).

#### **5.4.1 Course Descriptions**

Courses in the program build in complexity as the program progresses. Students will learn theoretical aspects and then apply this knowledge with hands-on projects and laboratory components. Students entering this program will have taken core natural science courses as entrance requirements (standard first-year UBC science courses), followed by more specialized science courses in second year, including introductory courses in forensic science and biochemistry. In the third and fourth years, students will take more advanced biochemistry and forensic science courses, including a number of forensic biology and laboratory courses. Students will also complete a research course (Honours Thesis or Advanced Laboratory Techniques) in fourth year, which will allow them to put into practice the knowledge and skills they have gained in their previous classes, including the BCIT research methodology course in third year. Students are gaining written and oral communication skills throughout the program by taking courses in liberal studies and technical communications, and during report writing and presentation assignments in many of the biochemistry and forensic science courses. The depth and breadth of the program is excellent, as students will gain training in various forensic science disciplines in addition to knowledge and skills in biochemistry, chemistry, and biology.

See section 5.3, Program Structure and Length, for the prerequisite courses prior to entering this program in second year. Also see Appendix 1 for the program map.

#### **Year 2 – Term 3 (Fall)**

##### **BCIT**

##### **FSCT 7320 Introduction to Forensic Science**

This course provides an overview of the fundamental principles of forensic science and its origins. Techniques and instrumentation employed by forensic experts and methodology used to maintain continuity and integrity of evidence are examined. The role of physical evidence in civil and criminal trials is also discussed.

### **UBC**

#### **CHEM 203 Introduction to Organic Chemistry**

Structure, bonding and physical properties of aliphatic and aromatic compounds; mechanistic analysis of chemical reactivity of common functional groups with a focus on carbon-heteroatom bond formation; functional group interconversion and oxidation/reduction reactions. Only open to students in Chemistry or Biochemistry specializations. Credit will be given for only one of CHEM 203 or CHEM 233, 235. *Prerequisite:* One of CHEM 113, CHEM 123, SCIE 001.

#### **BIOL 200 Fundamentals of Cell Biology**

Structure and function of plant and animal cells: membrane models, cytoplasmic organelles, biological information from gene to protein, the endomembrane system, secretion, intracellular digestion, endocytosis, transport processes, cytoskeleton and cell motility. Pre-reqs: Either (a) BIOL 112 and one of CHEM 123, CHEM 113 or (b) SCIE 001 (or (c) 8 transfer credits of first-year BIOL and 6 credits of first-year CHEM or (d) one of BIOL 112 or BIOL 121 and a corequisite of CHEM 203).

#### **STAT 200 Elementary Statistics for Applications**

Classical, nonparametric, and robust inferences about means, variances, and analysis of variance, using computers. Emphasis on problem formulation, assumptions, and interpretation. Pre-reqs: One of MATH 101, MATH 103, MATH 105, MATH 121, SCIE 001.

#### **BIOL 234 Fundamentals of Genetics**

Genotype and phenotype, mechanisms of inheritance, genetic analysis. Pre-reqs: Either (a) all of BIOL 112, BIOL 121 or (b) SCIE 001. (or (c) a corequisite of CHEM 203 and one of BIOL 112 or BIOL 121).

### **Year 2 – Term 4 (Winter)**

### **BCIT**

#### **COMM 7200 Report Writing and Communication for Forensic Investigation – NEW COURSE**



This course builds competencies in written and oral communication skills common to forensic science experts. The emphasis is on explaining technical material in plain language via written reports and oral presentations. The course also includes techniques for e-mails, letters, memos, and reports. Students prepare a professional job application and LinkedIn profile and examine strategies for maintaining their online reputation as professionals.

### **LIBS 7002 Applied Ethics**

Fosters abilities and values required for ethical decision making at work. Develops skills in logical analysis, a working knowledge of moral principles and theories, and the ability to diagnose and resolve moral disagreements commonly found at work. Examines and applies moral principles to historically famous cases in manufacturing, human resources, management, engineering, health care, and computing. Prerequisite: BCIT ENGL 1177, or 6 credits of BCIT Communication at the 1100- level or above, or 3 credits of university/college composition.

### **UBC**

### **CHEM 213 Organic Chemistry**

Spectroscopy of organic compounds. Mechanistic analysis of chemical reactivity of common functional groups with a focus on carbon-carbon bond formation; functional group interconversion. Preference will be given to students in Chemistry or Biochemistry specializations. *Prerequisite:* Either (a) CHEM 203 or (b) a score of 76% or higher in CHEM 233.

### **CHEM 245 Intermediate Synthetic Chemistry Laboratory**

Techniques in synthetic organic and inorganic chemistry. Open only to students in Chemistry or Biochemistry specializations. *This course is not eligible for Credit/D/Fail grading.* *Prerequisite:* Either (a) CHEM 203 or (b) all of CHEM 233, CHEM 235. *Corequisite:* CHEM 213.

### **CHEM 211 Introduction to Chemical Analysis**

Quantitative chemical analysis; chemical and physical principles of spectrophotometry, potentiometry, and chromatography. *This course is not eligible for Credit/D/Fail grading.* [3-3-0]. *Prerequisite:* One of CHEM 113, CHEM 123, SCIE 001.

### **BIOC 203 Fundamentals of Biochemistry**

Amino acids and proteins. Enzymes and enzymology. Human metabolic pathways. Structure, function and metabolism of carbohydrates including glycogen storage and gluconeogenesis. Restricted to students in Biochemistry specializations. Pre-reqs: All of BIOL 200, CHEM 203. Co-reqs: CHEM 213.

**Year 3 – Term 5 (Fall)****BCIT****FSCT 8150 Forensic Biology: DNA Typing Theory**

This online course provides instruction in forensic biology with a focus on current short tandem repeat (STR) technologies. The design of the course follows the logical progression of a forensic DNA case by including instruction in: evidence gathering and preservation techniques, the identification of biological evidence including presumptive and confirmatory testing, the extraction, quantitation and PCR amplification analysis strategies for common types of biological evidence (bodily fluids, hard and soft tissues and ‘touch’ DNA), and the interpretation methods utilized for single-source profiles, mixed profiles, parentage and kinship scenarios. Each module also includes practical interpretation exercises based on real case work scenarios in order to underpin the theoretical aspects of this applied forensic discipline.

**FSCT 8370 Quality Assurance for Forensic Science – *NEW COURSE***

This course explains the role that quality assurance and quality control play in an accredited forensic science laboratory. The requirements and applications of the standards ISO 17025 (General Requirements for the Competence of Testing and Calibration Laboratories) and CAN-P-1578 (Guidelines for the Accreditation of Forensic Testing Laboratories) are covered. The role and duties of a Quality Assurance Manager within a calibration or testing laboratory are covered. Students undergo numerous practical Quality Assurance activities, including conducting corrective action, continual improvement, and controlling documents and records. In addition, students will conduct an internal audit exercise which includes developing an audit plan and program, gathering audit evidence, conducting interviews, writing an audit report, and conducting an audit meeting.

**FSCT 8371 Business Management for Forensic Science – *NEW COURSE***

As laboratories continue to push for increased efficiencies, the importance of good management techniques has never been more relevant in the forensic community. Creating a foundation of financial literacy for students to build on allows the introduction of lean management and change management principles which can be applied in a laboratory context. Students will examine how ethical standards influence professional practice in forensics, and how efficiencies can be created in the context of a forensic science laboratory.

**UBC****BIOC 301 Biochemistry Laboratory (full year course)**

Techniques by which the chemical and physical properties of fundamental components of the cell are studied. Co-reqs: One of BIOC 300, BIOC 302, BIOC 303.

### **BIOC 303 Molecular Biochemistry (full year course)**

Structure, function and metabolism of lipids, steroids, amino acids and nucleotides; the biochemistry and molecular biology of replication, transcription, translation and gene regulation. For students in Biochemistry and Honours programs in other life sciences. Pre-reqs: One of BIOC 203, BIOL 201 and either (a) one of CHEM 204, CHEM 213 or (b) all of CHEM 205, CHEM 233.

### **Year 3 – Term 6 (Winter)**

#### **BCIT**

### **FSCT 7910 Research Methodology and Measurement Models**

This course is intended to develop the student's advanced research and analytical skills. It will focus on the theory of inquiry, the logic, reality, and structure of investigative enquiry, as well as data analysis, methodologies of measurement models and reporting of results. Emphasis will be placed on data gathering and statistical techniques. The student will be introduced to multivariate statistical analysis techniques, using SPSS for application in the law enforcement and forensics fields. Various models of measurement, including quantitative, qualitative and data mining techniques with hands on data sets will be covered. Groups will be required to prepare a mini research project using all the statistical applications covered in class.

### **FSCT 8155 – Forensic Biology: Evidence Recovery – *NEW COURSE***

This course provides instruction in evidence search and collection for the purposes of submitting samples for forensic DNA typing within an accredited laboratory environment. Evidence searching (including alternate light sources) is followed by screening of evidence with presumptive and/or confirmatory tests to identify the source of biological evidence including blood, semen, saliva, and urine. Students will also learn about microscopy principles and techniques to search for and identify biological evidence. Practical laboratory exercises teach the decision-making process for initiating complex searches with the proper methods for collecting and preserving wet and dry biological evidence, proper evidence storage, and maintenance of the chain of custody and evidence tracking. In addition, biological hazards and best safety procedures are covered. Prerequisite(s) FSCT 8150.

#### **FSCT Elective:**

**FSCT 7310 Crime Scene Investigation**

The course covers the major areas of crime scene examination, in order to give an in-depth understanding in theories of searching and in dealing with the entire range of physical evidence located during the various types of crime scene searches.

**FSCT 8230 Medicolegal Aspects of Alcohol**

This course examines the pharmacological and physiological effects of alcohol consumption on the human body. The theoretical basis and practical applications of various technologies, both laboratory based and field use based, that are currently utilized to determine blood alcohol concentration in the body will be thoroughly reviewed. Students will be given practical training in the usage of Approved Screening Devices and Evidentiary Breath Testing Instruments. Actual application and interpretation of the obtained blood alcohol concentrations results within a courtroom setting will also be discussed and further reinforced by use of sample case studies.

**FSCT 8320 The Science of Fingerprints – Theory**

This course covers the history of fingerprints as it relates to individualization; friction skin development; how to obtain a proper set of known fingerprint impressions; the Henry Classification System and the Auto-Class Classification System; fingerprint individualization with emphasis on Ridgeology; palm print individualization including the use of palmar flexion creases; procedures utilized in crime scene examination and recovery of fingerprints; chemical techniques for fingerprint detection; the Identification of Criminals Act; and the expert witness in the Canadian Court System.

**FSCT 8240 Forensic Toxicology – I**

This course serves as an introduction to the analytical techniques, scientific instruments and common drugs that are encountered by a practicing forensic toxicologist. Other topics that are explored include quality assurance in the lab, pharmacology and pharmacokinetics of drugs, impairment versus intoxication and how the interpretation of drug effect is utilized in the criminal court setting. The Science of Marijuana, along with some other interesting new drugs, will also be discussed. Directed reading, practical assignments and participatory discussions will introduce you to the science of forensic toxicology.

**UBC****Arts Elective**

Students may select any UBC Arts elective.

**BIOL 335 Molecular Genetics**

Isolation and identification of genes, analysis of gene structure; gene expression and its regulation in prokaryotes and in eukaryotes; developmental genetics. Pre-reqs: One of BIOL 233, BIOL 234, BIOL 334, MICB 322, FRST 302.

**Year 4 – Term 7 (Fall)****BCIT****FSCT 8160 Forensic Biology: DNA Typing Applications**

With the advent of new molecular techniques, DNA is the material of choice for forensic analysis. The current technology of polymerase chain reaction (PCR) makes it possible to identify an individual with a high degree of accuracy. A series of lectures and laboratory exercises will show students the strength of this powerful technique and how it applies to law enforcement. Prerequisites: FSCT 8150 and FSCT 8155 Forensic Biology: Evidence Recovery

**FSCT 7009 Law for Forensic Science – *NEW COURSE***

Forensic evidence is subject to many of the general rules related to the admissibility of evidence in the criminal trial process but there are also some unique rules governing the admissibility, scope and content of expert forensic evidence in the Canadian adversarial system. This course provides a detailed exploration and analysis of the fundamental legal principles and procedures that govern criminal proceedings in Canada, including identification, integrity and introduction of evidence by both Crown and defence, with a particular emphasis on issues applicable to forensic investigators and scientists as witnesses.

**UBC****Research Course Options:****BIOC 449 Honours Thesis**

A research problem under the direction of a faculty member. Restricted to Honours students.

**BIOC 420 Advanced Biochemical Techniques** (combined with a 3 credit Advanced BIOC elective below)

Multi-week experiments in areas of contemporary biochemistry research using classical and modern techniques. Emphasis on experimental design, technique, critical analysis of data, and scientific communication skills. Restricted to

Honours students in Biochemistry and others with permission of the instructor.  
*Corequisite:* BIOC 404

### **BIOC 402 Proteins: Structure and Function**

Structural components of proteins, classification by primary, secondary and tertiary structure, protein chemistry and purification, peptide and protein synthesis by chemical means and three-dimensional structure determination using X-ray diffraction and NMR. Pre-reqs: One of BIOC 302, BIOC 303 or BIOT380.

### **BIOC 410 Nucleic Acids - Structure and Function**

Chemical, physical and biological properties of nucleic acids and their role in replication, transcription, translation and regulation of expression of genetic material. *Prerequisite:* Either (a) all of BIOC 303, BIOL 335 or (b) BIOT 380 (A minimum standing of 65% is recommended in these courses.)

### **Year 4 – Term 8 (Winter)**

#### **BCIT**

### **FSCT 7010 The Expert Witness: Prepared for Court**

This course is designed for professionals in a variety of disciplines who may have to testify in a criminal or civil case. Technical competence is only the beginning of an expert witness' role. To be relevant, one's analysis must be effectively communicated to the trier of fact. The progression from crime scene to courtroom is described and analyzed by considering legal principles, actual court practice, trial strategies and moot court demonstrations. Prerequisite(s): FSCT 7009 Law and Forensic Science.

### **FSCT 8156 Forensic Chemistry and Toxicology – *NEW COURSE***

This course provides practical instruction in the area of forensic drug chemistry and toxicology, with a focus on the instrumental analysis of biological samples to aid in forensic investigations including homicide, sexual assault, driving impairment cases, and death investigation. This course follows the progression of a case for a forensic toxicologist by ensuring proper evidence handling, drug extraction from biological samples, instrumental analysis (LC-MS-MS and GC-MS), data interpretation, quality assurance, and report preparation. Students will give a group presentation on topics related to forensic chemistry and toxicology. Drug metabolites, pharmacokinetics, toxicity and effects on the human nervous and cardiovascular system are also covered. Prerequisite(s): 2<sup>nd</sup> year Analytical Chemistry course or FSCT 8240 Forensic Toxicology 1.

### **FSCT 8305 Population Genetics – *NEW COURSE***

This course covers the topic of population genetics including the relevance of this topic to the field of forensic DNA analysis. Topics covered include forensically-relevant genetic markers, genetic variation, Hardy-Weinberg equilibrium, linkage equilibrium, allele frequency, types of natural selection, mutation, inbreeding, population structure, and geneflow among others. Practical exercises allow students to gather data, apply analysis and present results.

### **UBC**

#### **Research Course Options**

##### **UBC – Research Course Options:**

#### **BIOC 449 Honours Thesis (continued)**

A research problem under the direction of a faculty member. Restricted to Honours students.

##### **Advanced Biochemistry Elective Options**

(1 course plus one if student takes BIOC 420 instead of the BIOC 449 Honours Thesis)

#### **BIOC 403 Enzymology**

Kinetic analysis, catalytic mechanisms, transition state stabilization and regulation of activity, strategies for active site characterization and case studies of well-documented enzyme systems. Pre-reqs: BIOC 402. (A minimum standing of 65% is recommended.)

#### **BIOC 440 Concepts in Molecular Biology**

Developing areas of molecular biology, focusing on experimental design and data analysis. Signal transduction, the use of model eukaryotes, and the regulation of gene expression. Pre-reqs: One of BIOC 303, BIOT 380 and all of BIOC 402, BIOC 410.

#### **BIOC 450 Membrane Biochemistry**

Biochemistry of membranes and membrane proteins, membrane fusion, electrical signaling, and the involvement of membrane proteins in disease and drug development. Pre-reqs: One of BIOC 303, BIOT 380 and all of BIOC 402, BIOC 410.

#### **BIOC 460 Advanced Techniques in Biochemistry**

Theoretical basis and practical applications of a selection of advanced techniques currently used in biochemical research. Pre-reqs: One of BIOC 303, BIOT 380 and all of BIOC 402, BIOC 410.

## 5.5 Student Evaluation

As this program will involve a variety of teaching approaches such as face-to-face instruction, case/problem-based learning, independent assignments, and group work, a variety of student evaluation strategies will be used. Assessment strategies for this program are expected to include:

- Mid-term, finals, quizzes
- Lab reports, case report write-ups, article critiques
- Class presentations, group projects, team presentations, participation
- Practical exams (moot court demonstration, simulated crime scenes, expert testimony)
- Assignments (relevant to industry)
- Research thesis, research paper, research project, research presentation

These assessment strategies will be appropriate to effectively test the learning outcomes specified in the course outlines and the overall program goals. Evaluation of learning outcomes and expectations are set by each instructor and described in the approved course outlines (see Appendix 11), which provide information to students about expectations of satisfactory achievement levels. BCIT Marking and grading practices are detailed in Policy 5103, Student Evaluation Policy (<http://www.bcit.ca/files/pdf/policies/5103.pdf>) and the Grading Procedure 5103-PR1 ([http://www.bcit.ca/files/pdf/policies/5103\\_pr1.pdf](http://www.bcit.ca/files/pdf/policies/5103_pr1.pdf)). These policies are included in Appendix 12. UBC grading practice and policies can be found in the UBC calendar under policies and regulations, grading practices (<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,42,0,0>).

## 5.6 External Review

### 5.6.1 External Panel Review

BCIT includes an External Panel Review as part of its institutional program development process, which is beyond what is required by the DQAB for the purposes of posting on the Ministry website for peer review. The External Review Panel visited BCIT to conduct the review on June 5<sup>th</sup>, 2015. The panel members included external educators, an internal educator and industry representatives (see Appendix 9 Members of Degree Review Panels). The panel submitted a report summarizing its findings to the BCIT Vice President Academic on July 6<sup>th</sup>, 2015 (see Appendix 10 External Panel Review Report).



Overall the external panel members provided very positive feedback and encouragement for the proposed joint credential. The panel felt that this degree would develop a strong reputation based on the quality of the two schools and the interdisciplinary nature of the program. The panel also felt that the program, the only one in Western Canada, would become a regional forensic science training center that would provide world class training to the Northwest that would produce job ready candidates.

While the external panel members did not have any major concerns they have provided some areas that require additional attention including the development of a vision (or mission statement) for the program, provide further details about the role of the steering committee, and suggestions to ensure the joint program operates as smoothly as possible.

### 5.6.2 Benchmarking

BCIT's department of Forensic Science and Technology currently offers either a Bachelor to Technology or an Advanced Certificate in Forensic Investigation (Forensic Science Option). These credentials have recently undergone a positive program review, and we expect they will continue to meet the needs as a general investigative credential for non-scientists or individuals that already have a Bachelor of Science degree in a non-forensic discipline.

The UBC Department of Biochemistry and Molecular biology currently offers Bachelor of Science (B.Sc.) degrees with specializations in Major biochemistry, Honours Biochemistry, and Combined Honours in Biochemistry and Chemistry. It also offers Masters (M.Sc.) and doctorates (Ph.D.) in Biochemistry. An external review of the department was recently completed, with positive results for the department and more specifically in the undergraduate programs.

Currently only five institutions offer a Bachelor of Science degree in Forensic Science in Canada, with all of them located in Ontario:

- University of Toronto (<http://www.utm.utoronto.ca/forensic/>)
- University of Ontario Institute of Technology  
(<http://www.science.uoit.ca/undergraduate/programs-and-information-for-prospective-students/forensic-science/>)
- Laurentian University (<http://laurentian.ca/program/forensic-science>)
- Trent University (<https://www.trentu.ca/forensicscience/>)
- University of Windsor (<http://www1.uwindsor.ca/interfaculty/forensics/>)

Our unique proposed degree program would combine the strengths of two world-class post-secondary institutions and would be perfectly positioned as the only Bachelor of Science in Forensic Science degree offered in Western Canada. Over 68% of forensic science respondents to our industry survey indicated that they strongly agreed or agreed that this proposed program offered jointly by BCIT and UBC would indeed fill a void in Western Canada by providing a Bachelor of Science with specializations in biochemistry and forensic science. In addition, our proposed program would be different from traditional university forensic science degrees because graduates from this proposed program will learn from two different world class educational institutions, will have taken a significant number of upper level biochemistry and biology courses (including potentially a biochemistry Honours Thesis course where they will gain valuable experience in an academic research laboratory), and will learn from forensics instructors that come directly from the forensic science industry. In addition, this program contains an optional co-op program where students will gain valuable experience working in a laboratory setting and also gain knowledge of how to effectively apply and interview for jobs.

This proposed four-year degree is designed to meet the international requirements of the Forensic Science Education Programs Accreditation Commission (FEPAC: <http://www.aafs.org/fepac>), which was established by the American Academy of Forensic Sciences. Obtaining this accreditation would assure potential students and employers that this joint BCIT-UBC degree is providing a high-level forensic science education that will produce top-quality forensic science graduates. When the proposed program obtains accreditation status, it will be only the third such accredited degree offered in Canada (Laurentian University currently holds the FEPAC accreditation and UOIT holds conditional accreditation).

The following table compares the proposed program with Bachelor of Science in Forensic Science degree programs at other Canadian institutions.

Program Comparison						
Name of Program	Institute	Level/ Credential	Specializations	FEPAC Accreditation	Work Experience / Practicum/ Co-op	Research Component
Biochemistry and Forensic Science	BCIT and University of British Columbia	Joint Bachelor of Science (Combined Honours)	Biochemistry and Forensic Science	Will apply for FEPAC accreditation	Optional Co-op	Research Thesis or Advanced Lab course and elective
Forensic Science	University of Toronto	Bachelor of Science (Honours)	Forensic Anthropology, Forensic Biology, Forensic Chemistry, Forensic Psychology, and Forensic Science	No	200 hours required at a forensic agency, job shadowing, or collaborate on a project with an industry partner	Students attend classes on research skills.
Forensic Science	Laurentian University	Bachelor of Science (Honours)	Single specialization in Forensic Science <b>OR</b> Double specialization in Forensic Science and chemistry	Yes	Research thesis or internship	Research thesis or internship
Forensic Science	Trent University	Bachelor of Science (Honours)	Forensic Science <b>OR</b> Joint Major in Forensics and either Physics, Biology, Computer Sciences, Political Science	No	2nd year study placement in the field; the Forensic Science mentorship/placement is required	Research thesis option or independent project
Forensic Science	University of Windsor	Bachelor of Forensic Science (Honours) <b>OR</b> Combined Bachelor of Arts in Forensics and Second Discipline (Honours)	Forensic Science <b>OR</b> Combined B.A. in Forensics and either Criminology, Psychology, Philosophy, Political Science, English, French or Anthropology	No	No	No

Program Comparison						
Forensic Science	University of Ontario Institute of Technology	Bachelor of Science (Honours)	Physics, Psychology, Chemistry, Biology	No	Optional internship	Thesis project or senior electives
Forensic Studies Certificate Program	Simon Fraser University	3rd and 4th year level Certificate	Forensic Studies	No	No	No
Forensic Science	St. Mary's University	Diploma	Forensic Science	No	No	No
Biotechnology –Advanced (formerly Biotechnology Technologist – Forensics)	Flemming College	Diploma	Biotechnology	No	Internship	No

## 6 Learning Methodologies and Program Delivery

### 6.1 Learning Methodologies

Instructors in the Biochemistry and Forensic Science joint degree program are committed to using learning methodologies that foster inquiry, critical thinking, analysis, problem solving, collaboration, team work, competent hands-on performance, reflective practice, and effective communication. Instructors for this program will include UBC professors with valuable teaching and research experience and industry-based BCIT faculty members who are subject matter experts in the field of forensics. This diversity of instructor experience will greatly benefit students and expose them to a variety of different teaching approaches and expertise. Lectures, laboratory work, tutorials, group projects, and assignments will form the foundation of learning for the students in this proposed program.

This collaborative degree with UBC will incorporate a variety of teaching approaches:

- Case-based learning – case studies are presented in lectures including those of guest lecturers in the Introduction to Forensic Science course and case law in the Law for Forensic Science course. Forensic instructors also bring a wealth of real case experience with them into the classroom form which the construct mock case exercises.
- Experiential learning – students will gain valuable hands-on experience during the numerous laboratory-based courses at both institutions, optional co-op, expert witness moot court demonstrations, DNA testing and chemical analysis with industry-specific equipment, basic biochemical techniques, and research during the biochemistry Honours Thesis course.
- Problem-based learning – students will consider real-life examples and challenges experienced by current forensic scientists and scientists carrying out research in the biochemistry and molecular biology fields.
- Simulations – mock crime scenes are used in many of the forensics courses and for the moot court exercises during the Expert Witness course.
- Collaborative learning – this program will truly be collaborative in nature. Students will benefit from learning at two different institutions in a program which combines the higher learning of one with the applied knowledge of the other. In addition, at UBC they will be taught by individuals with extensive research experience, and at BCIT they will be taught by individuals with extensive industry experience.

## 6.2 Program Delivery

Most of the classes in this proposed program would be delivered face-to-face, with some classes delivered either entirely online or in a blended format with classroom and online components. Of the classroom-delivered courses, a number of them at both UBC and BCIT are either laboratory-based or have a laboratory component. As students will be taking courses at both the UBC Vancouver campus and BCIT's Burnaby and Downtown campuses we have been exploring options to minimize the travel that students will experience in this proposed program. In addition to online and hybrid courses, strategies will include developing a standard timetable for all biochemistry and forensic science students which will ensure ample time for commuting, scheduling some BCIT courses at the Downtown BCIT campus, and investigating the ability to have students watch some UBC lectures at BCIT on days where they have a BCIT evening class. Students in this program will have a U-Pass and there is a bus line that provides direct access between UBC and BCIT. Students will be eligible to take an online LIBS 7002 Applied Ethics course which has a solid track record having been offered online for many years and been taken by thousands of BCIT students. Alternatively, students can also take this course in a classroom setting at either the Burnaby or Downtown campus. Online forensics courses in the program include FSCT 8150, Forensic Biology: DNA Typing Theory and the elective FSCT 8240, Forensic Toxicology I. Students would benefit from taking these courses online, because they would decrease the amount of travel that the students would need to make between the two institutions. The learning outcomes for these online courses are appropriate for students to achieve the proposed program's goals. The blended courses in the proposed program involve online and face-to-face components with the forensics expert in a classroom, laboratory or crime scene environment. The following blended courses may be taken either as required courses or electives in the proposed program:

- Forensic Biology: DNA Typing Applications
- Crime Scene Investigation

The BCIT courses in this proposed program that are either fully online or hybrid (blended) are delivered using the Desire 2 Learn (D2L) platform. The BCIT Learning and Teaching Centre (<http://www.bcit.ca/ltc/ets>) provides support to both students and instructors related to this platform. The BCIT Learning and Teaching Centre (<http://www.bcit.ca/ltc/>) also provides curriculum development support and instructional skills workshops to our instructors.

All of the courses in this program at UBC are classroom-based, but they may also use Blackboard Connect, which is the online platform at UBC (<http://elearning.ubc.ca/connect/>). The UBC Centre for Teaching, Learning and Technology (<http://cilt.ubc.ca/>) provides students and faculty with online learning support. In addition, the Centre provides support for faculty in course development and other resources.

BCIT's Forensic Science and Technology department encompasses instructors in forensic science, policing, law, and medicine, among other disciplines. Based on our instructors' feedback during the program review of the Bachelor of Technology and Advanced

Certificate programs, BCIT's diverse instructors maintain their expertise and currency via ongoing professional development, including:

- Extensive work experience that includes in-house training programs
- Pursuing advanced education
- Attendance and presentations at various conferences and seminars
- Membership and fellowship with various professional organizations
- Authoring journal articles and textbooks
- Attendance at BCIT PD Day, Instructional Skills Workshop, Desire 2 Learn training, and the Fostering Online Learning course

In a recent program review of BCIT's Bachelor of Technology degree, the majority (65%) of instructors in the Forensic Science Option indicated that they have been teaching in our department for more than five years. Based on BCIT's instructors' positions as industry experts, their ongoing professional development activities, and their extensive teaching experience within our department, we feel this proposed program will be able to deliver a high level of education using various delivery formats (classroom, online, and blended).

## 7 Admission and Transfer/Residency

### 7.1 Admission Requirements

The primary target audience is students who have a strong science foundation, and who would like to specialize in the exciting fields of forensic science, biochemistry and molecular biology and can meet the high entry and performance (Honours) level standards of the program. Students will enter the Combined Honours program in the second year, after completing certain required courses in the first-year Science program at UBC. Students attending other institutions and taking first-year science courses will be able to apply for entrance into UBC Science, transfer their courses to UBC, and then apply to this program. In keeping with UBC's Biochemistry requirements, students must achieve a minimum grade point average, making entrance into the program competitive. Students will need a minimum average of 70% to enter the program. However given the limited seats in this Combined Honours program (15 seats), the actual cut-off is anticipated to be higher and will vary from year to year.

Applicants are required to complete at least 30 credits of first-year Science at UBC (or equivalent university courses through approved transfer to first-year Science at UBC), including the following:

- 8 credits of UBC Chemistry 121 (or CHEM 111) and Chemistry 123.
- 3 credits of 100-level UBC English. English 112 is recommended. (or 3 credits of SCIE 113)
- 5 credits of UBC Biology 121 and Biology 140
- 3 (or 4) credits of UBC Differential Calculus
- 3 (or 4) credits of UBC Integral Calculus
- A minimum grade point average of 70% (with the actual cut-off possibly being higher given the limited number of seats)

In addition, students are required to take Physics 101, 118, and 119 and 3 additional credits of 100-level UBC English to graduate with this degree, but these courses are not entrance requirements. Students can decide if they want to take these courses in first year with the other required courses (i.e., for a total of 34 credits) or complete these courses after acceptance into the program. After the students have initially been accepted into the program following UBC's process, they will need to obtain a criminal record check as part of the entrance requirements for the program. The BCIT Forensic Science and Technology department will handle the criminal record check while UBC will handle the waitlist for students that want to enter this program. BCIT's Admission process is detailed in the Admissions Policy (<http://www.bcit.ca/files/pdf/policies/5003.pdf>) and the Admission Procedure ([http://www.bcit.ca/files/pdf/policies/5003\\_pr1.pdf](http://www.bcit.ca/files/pdf/policies/5003_pr1.pdf)). UBC's admissions process and transfer of credits to UBC can be found in the following policies (<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,13,0,0> and



<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,406>). These policies are included in Appendix 12.

## 7.2 Transfer Arrangements

Both BCIT and UBC have links to the British Columbia Council on Admissions and Transfer (BCCAT) transfer guide and have identified transfer articulations for all BC institutions. Students attending other institutions and taking first-year science courses will be able to apply for entrance into UBC Science. They will then be able to transfer their first-year courses to UBC and apply to this program. UBC will handle the eligibility and evaluation of transfer courses. UBC's admission and transfer policy can be found at the following link: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,406>. There are no other transfer arrangements for this program. As this program is an Honours program, UBC requires Honours students to have at least 30 credits each winter session (September to April), which means that even if a student successfully applies for transfer credit for a course, they may need to take another course to maintain their required minimum credit level (30 credits a year) to remain in the Combined Honours program.

## 7.3 Residency Requirements

To satisfy academic residency requirements for a BCIT credential, a student must satisfactorily complete a minimum of 50% of the total required program of study at BCIT. Likewise, to satisfy academic residency requirements for a UBC credential, a student must satisfactorily complete a minimum of 50% of the total required program of study at UBC. However, since this is a joint credential between UBC and BCIT, this 50% residency requirement is no longer required. Students enter this program after taking first year science courses at UBC or by taking equivalent courses at another institution and transferring them to UBC prior to applying to this program. After students enter in second year, they will take 58% of their credits at UBC and 42% of their credits at BCIT in years 2 to 4.

## 8 Faculty

Staff and faculty from the Forensic Science and Technology department at BCIT and the Biochemistry and Molecular Biology department at UBC comprise the School Working Group for the proposed program. The proposed program involves the development of six new courses at BCIT, with the other courses in the program currently existing at BCIT and UBC. BCIT staff will work with the current instructors, faculty in the BCIT Communications department, and industry experts to develop the curriculum for those six new courses. Additional BCIT instructors will be hired as required to develop and instruct these new courses.

As the Forensic Science and Technology programs (BTech and AC) are Part-Time Studies programs, the courses in these programs are taught by instructors that also work in the forensic science industry. This will continue for this proposed program. Nine instructors will deliver the required forensics courses in the proposed program and an additional five instructors will deliver the optional elective courses. The nine instructors that teach the required BCIT courses include:

- Jason Moore (Forensic DNA Analyst and Quality Assurance Manager)
- Dr. Dean Hildebrand (Associate Dean and DNA Consultant)
- David McKay (Program Head and Forensic Video Analysis Expert)
- Steen Hartsen (Forensic DNA Analyst)
- James Currie (Forensic Biologist)
- Dr. Joe Ilsever (an expert in statistics and research methodology)
- Deanne Gaffar (Criminal Defence Counsel and *ad hoc* Crown Counsel)
- Brent Bagnall (Criminal Defence Counsel)
- Dr. David Hasman (Analytical Chemist)

These instructors have between five and 43 years of industry experience and have been teaching or working in the BCIT Forensic Science and Technology department for at least two years.

The five instructors that will teach the elective BCIT courses include:

- Eric Grummisch (a retired member of the VPD Forensic Identification Unit)
- Brian Andrews (retired RCMP Inspector, Forensic Identification Services)
- Richard Ulrich (retired RCMP Toxicologist and Consultant)
- Melanie Brission (Forensic Toxicologist)
- Mike Rosland (Forensic Toxicology Specialist)

These instructors have between six and 42 years of industry experience and have been teaching in the BCIT Forensic Science and Technology Department for at least four years.

UBC Biochemistry courses in the proposed program will be delivered by 12 research and teaching faculty members of the Biochemistry and Molecular Biology department. These twelve instructors include:

- Dr. Warren Williams (Senior Instructor and Advisor)
- Dr. Scott Covey (Senior Instructor and Advisor)
- Dr. Jorg Gsponer (Assistant Professor)
- Dr. LeAnn Howe (Associate Professor)

- Dr. Eric Jan (Associate Professor)
- Dr. Michael Krisinger (Instructor and Research Associate)
- Dr. Robert Maurus (Instructor)
- Dr. Jason Read (Instructor and Advisor)
- Dr. Michel Roberge (Professor)
- Dr. Filip Van Petegem (Associate Professor)
- Dr. Calvin Yip (Assistant Professor)

All of these research and teaching faculty have extensive research and teaching experience at UBC (2 to 30 years' experience). In addition many of these faculty members have extensive experience supervising undergraduate and graduate research theses.

UBC exercises very stringent criteria for the hiring and promotion of research and teaching faculty, which are documented in UBC policies and within the collective agreement (<http://www.hr.ubc.ca/faculty-relations/collective-agreements/>). All faculty members who have achieved tenure status will have been promoted through a career progress review process that involves internal and external review from recognized international experts in education and research. A summary of the qualifications of the BCIT forensics instructors and UBC biochemistry faculty is provided in Appendix 3.

BCIT's Faculty Qualifications Policy 5601 (<http://www.bcit.ca/files/pdf/policies/5601.pdf>) outlines the general guidelines with respect to qualifications expected for BCIT faculty, reflecting the diverse nature of BCIT's programming. Criteria for hiring faculty and/or instructors for this program will include:

- academic and/or professional/industry credentials to teach undergraduate level courses in the program
- employment experience relevant to the program area and curriculum, demonstrating an appropriate level of success or mastery in the field
- commitment to teaching excellence, demonstrated by maintaining currency with relevant industry practice, advancement of credentials, and/or scholarly activity

Qualified faculty from other disciplines with significant experience or ongoing research programs in a related discipline area may also be offered appointments as assistant faculty.

Policies and practices pertaining to faculty issues such as academic/professional credentials, faculty performance, professional development, and maintaining professional currency are addressed in the Faculty and Staff Association Collective Agreement (<http://www.bcit.ca/files/hr/pdf/fsa0710ca.pdf>) and in the Faculty and Staff Association Performance Development System (<http://www.bcit.ca/files/pdf/policies/6601.pdf>).

BCIT forensics instructors are industry experts working in the field who maintain their expertise by participating in work training programs and proficiency testing, pursuing advanced education, conducting applied research activities, attending conferences and workshops, and maintaining professional membership, among others. UBC faculty that will be teaching in this proposed program bring extensive experience in the areas of instructing and conducting scholarly research and peer-reviewed publication.

BCIT encourages diverse and innovative teaching methodologies to help students achieve mastery of competencies, which are often defined by accrediting bodies and require preparation

for external exams. BCIT encourages faculty to pursue individual interests in research that advance the state of practice. BCIT's Intellectual Property policy can be found at <http://www.bcit.ca/files/pdf/policies/6601.pdf>. Any research involving human subjects must be approved by the BCIT Research Ethics Board (<http://www.bcit.ca/files/pdf/policies/6500.pdf>). BCIT's policy on Integrity in Research can be found at <http://www.bcit.ca/files/pdf/policies/6600.pdf>). These policies can also be referenced in Appendix 12.

## 9 Program Resources

### 9.1 Facilities and Equipment

The Forensic Science and Technology department has offices for our program coordinators and support staff in the SE-42 building, one office at the Downtown campus and offices in building SW3. In addition our department operates a forensic DNA laboratory located in SW3 that conducts forensic casework for clients, which include the British Columbia Coroners Service and the Insurance Corporation of British Columbia. Courses offered by the Forensic Science and Technology department are either at the Burnaby or Downtown campus. The Forensic Science and Technology department strives to incorporate applied learning activities in courses whenever possible, including using equipment or software found in industry. Students enrolled in the current Forensic Science Option (BTech and AC) take multiple courses where they get hands-on experience working in a laboratory setting or a mock crime scene simulation. Students in this proposed program will also be able to use the following equipment and technologies in their courses and/or during their thesis research:

- Modern forensic DNA typing equipment and practices
  - Hardware (Genetic Analyzers, standard and real-time PCR, Sperm Hy-Liter, fluorescence microscopy, etc.)
  - Software (GeneMapper-X software, JusticeTrax)
- Modern forensic chemistry equipment (LC-MS-MS, GC-MS, HPLC, FTIR, etc.)
- Fingerprinting equipment
- Forensic photography equipment
- Forensic video analysis and digital imaging technology and software used to provide cutting-edge training using the same forensic tools investigators in the field will be using to analyze and examine multimedia evidence
- Realistic scenarios: simulated court room (with actual legal professionals); crime scene scenarios (with Forensic Identification Specialists); rural scene exercises (BCIT Maple Ridge woodlot) for scattered remains, outdoor crime scenes, entomology, and post-mortem interval exercises, etc.

The UBC Biochemistry and Molecular Biology department has classroom and teaching laboratory facilities located in numerous buildings (Table 3). In addition, the department has a significant number of research laboratories where students from this proposed degree could conduct research during their Honours Thesis course. There are 16 core members of the Biochemistry and Molecular Biology department with labs in the Life Sciences Centre. The department also has administration space in the Life Sciences Centre as well as space allocated for major equipment, including an X-ray diffractometer, a Nuclear Magnetic Resonance (NMR) instrument, and Electron Microscopes. The Biochemistry and Molecular Biology department also maintains third year and fourth year teaching laboratories with the following equipment:

- Analytical balances
- Electrophoresis supplies (SDS-PAGE, agarose gel, etc.)

- Microcentrifuges
- Spectrophotometers
- Microscopes
- DNA thermocyclers

**Table 3: Space Allocation for the UBC Biochemistry and Molecular Biology Department**

<b>Location</b>	<b>Faculty, Staff (Associate members)</b>	<b>Total (sq. ft.)</b>
Life Sciences Centre	Research laboratories with offices for 10 core members and 4 associate members	27,000 *
D.H. Copp Building	Third- and fourth-year teaching laboratories, support space and offices for 4 instructors	7,200
Michael Smith Labs and NCE – location of CHiBi	Laboratories, support space and offices for 5 core and 1 associate member	7,200 *
BC Cancer Research Centre	Laboratories, support space and offices for 1 core and 1 associate member	~2,000 *
Chemistry Department	Laboratories, support space and offices for 1 core and 1 associate member	~2,000 *
Jack Bell Labs, CMMT/CFRI, Land & Food systems	Laboratories, support space and offices for 4 associate members	~4,000 *
*Space in these units is not controlled by the Department but is allocated to principal investigators by other departments or organizations.		

## 9.2 Learning Resources

The BCIT Library housed at the Burnaby campus provides access to print and media collections. Online, electronic information from sources around the world are also available through the library's website. Research journals such as ACM Digital Library and interlibrary loans are readily available to faculty and students. The BCIT Library also

provides electronic full-text access to required journals and other course materials. For more information, visit the library website: <http://www.lib.bcit.ca/eResources/>.

The Forensic Science and Technology department library resources include librarian Tony O'Kelly, a Forensics Library Guide (<http://libguides.bcit.ca/forensics>), and a number of forensic science e-journals (including the Journal of Forensic and Legal Medicine and the Forensic Science International) and print journals (Canadian Society of Forensic Science and the Journal of Forensic Sciences). Students also have access to the Lexis Nexus Quicklaw database to read Canadian Court decisions and case law.

The University of British Columbia Library system (<http://www.library.ubc.ca>), consisting of 19 branches and divisions, is one of the most extensive in western Canada. Biochemistry students and faculty primarily use the Woodward Library (<http://woodward.library.ubc.ca>) conveniently located across from the Copp building (home of the Biochemistry undergraduate teaching labs). Helen Brown and Mayu Ishida are the Liaison Librarians supporting the Biochemistry and Molecular Biology program. Helen Brown is also the Liaison Librarian for a number of health sciences fields including Medical Genetics, while Mayu Ishida is also the Liaison Librarian for Statistics, Microbiology and Immunology, and Biology. Kevin Lindstrom is the Liaison Librarian for Chemistry with experience in forensic science and can provide additional support when needed. The UBC Library has the largest online and print journal collection in British Columbia, including journals relevant to biochemistry such as:

- Science
- Nature
- Proceedings of the National Academy of Sciences
- Biochemical Journal
- Biochemistry
- Journal of Biological Chemistry
- Nucleic Acids Research
- FEBS Letters
- Journal of Molecular Biology

In addition, the Woodward Library has a large collection of biochemistry electronic and printed texts available to students, ranging from basic texts such as Lehninger's Principles of Biochemistry and Stryer's Biochemistry to much more advanced texts such as Molecular Motors (methods and protocols) and Structural Approaches to Sequence Evolution.

BCIT maintains an instructional and technical support centre – the BCIT Learning and Teaching Centre – that provides student and faculty orientation, program and curriculum development, instructional design services, training, and accessible technical assistance for students and faculty (<http://www.bcit.ca/ltc/>). UBC also operates a similar center which serves the UBC faculty called the Center for Teaching, Learning, and Technology (<http://ctlr.ubc.ca/>).

Some of the courses in this proposed program are either fully online or hybrid (combination of online and classroom). Distance and Online Learning at BCIT is accessed using the Desire 2 Learn platform (<https://learn.bcit.ca/>) which is supported by the Educational Technology Services department of the BCIT Learning and Teaching

Centre. All of the UBC courses are classroom-based courses; however, they may also use the online platform Blackboard Connect (<http://elearning.ubc.ca/connect/>).

To ensure each program at BCIT maintains a high educational quality, BCIT mandates a regular schedule of curriculum reviews and program reviews. In addition, each program at BCIT has a Program Advisory Committee (PAC) which provides industry input into the relevancy of the program. Currently there is a PAC for the Forensic Science and Technology department along with sub-PACs for each of the three options (Forensic Science, Computer Crime and Crime and Intelligence Analysis). The Forensic Science Option sub-PAC and overall PAC will be used to provide valuable and strategic direction for this new degree. It is also anticipated that the program will apply for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC: <http://www.aafs.org/fepac>), which was established by the American Academy of Forensic Sciences and requires that the program have an ongoing program evaluation process in place.

### 9.3 Program Service Requirements

BCIT institute services such as program advising, counselling, tutoring through the Learning Commons, and the Library will be available to students of the proposed program. Students at UBC will have access to departmental and Faculty of Science advisers (<http://science.ubc.ca/students/advising>). They will also have access to career services (<http://students.ubc.ca/career>), counselling (<http://students.ubc.ca/livewell/services/counselling-services>), and tutoring services (<http://learningcommons.ubc.ca/tutoring-studying/>).

### 9.4 Program Implementation

The intended start date of the program is September 2017. However, this timeline depends on the external review process. Since a number of the courses in the program already exist at UBC and BCIT, it is expected that this program could be implemented rapidly upon approval. In addition, as the entrance requirements for the program are generally the majority of courses taken by first-year Science students at UBC, once the program has been approved, we could accept students at the end of first year (when UBC students generally declare majors) to start in the program in September of their second year. The following table outlines the program enrolment plan, where students apply after one year of science at UBC and enter the program in year 2:

Year of degree program	2017	2018	2019	2020	2021
2 <sup>nd</sup> year	15	15	15	15	15
3 <sup>rd</sup> year	0	15	15	15	15
4 <sup>th</sup> year	0	0	15	15	15
Total	15	30	45	45	45



## 10 Program Consultation and Needs Assessment

The BCIT Forensic Science and Technology department and the UBC Biochemistry and Molecular Biology Department have consulted extensively in the development of this proposal. In addition, both departments have consulted with internal stakeholders to develop a plan for program administration. In addition, the 2013-2014 program review of Forensic Science and Technology programs have also shaped the development of this proposed program.

The first step of program development at BCIT involved the development of a concept paper for the Bachelor of Science (Combined Honours) in Biochemistry and Forensic Science. The concept paper was first reviewed by the School Working Group (which includes members from UBC and BCIT) and the BCIT School of Computing and Academic Studies Quality Committee. Next the concept paper was reviewed and approved by both the Dean of the School of Computing and Academic Studies and the Vice President of Education, Research and International. Finally, the concept paper was reviewed and approved by the Education Council and the Board of Governors.

A needs assessment was conducted to determine the need for a Bachelor of Science (Combined Honours) degree in Biochemistry and Forensic Science offered jointly by BCIT and UBC. Information was collected through:

- A literature review
- Published employment statistical data
- Surveys conducted during BCIT's Forensic Science and Technology program review, including surveys of industry, alumni and current students
- Survey of the forensic science and biochemistry industry specifically about this proposed degree
- Survey of current UBC Biochemistry students about their interest for this proposed degree
- Industry interviews
- Letters of support

The surveys conducted during BCIT's Forensic Science and Technology program reviews were useful in determining the need for this proposed credential. The surveys were conducted between July 22 and August 22, 2013, and included 45 respondents from the forensic science industry, 25 BCIT alumni of the Forensic Science Option (Bachelor of Technology or Advanced Certificate), and 27 current students in the Forensic Science Option.

The forensic science and biochemistry industry survey specific to this proposed program was conducted between January 14 and February 4, 2014 and included 62 respondents. The survey of current UBC Biochemistry students was conducted between November 15 and November 30, 2013 and included 79 respondents.

During the needs assessment of the proposed program we further consulted with numerous forensic industry experts from the areas of forensic DNA, forensic toxicology, and quality assurance. These individuals provided input that we have used during our program development. Two of these individuals, one from the RCMP Forensic

Laboratory Service and one from the Ontario Centre of Forensic Sciences, conducted our industry interview as well.

In addition, we have received a number of letters of support for this proposed program from forensic science industry experts representing various private and public forensic science organizations and educational programs. Excerpts from letters of support are shown below. Please see Appendix 4 for the full text plus other letters of support.

*“I have been directly involved in the hiring of more than 25 new employees in private DNA testing laboratories. My approach to hiring has always been to hire applicants who have strong academic background and laboratory experience in the areas of molecular biology, genetics, biochemistry and statistics that forms the basis of forensics or DNA testing technologies. The proposed curriculum of this program addresses all these courses. Interdisciplinary programs are the key to any successful science program and this is the core of this new forensic science program. Thus, graduates from this program would have the flexibility to either enter government laboratory system, private laboratories or advanced education.*

*Additionally, forensic science is changing at a great pace such as change in DNA extraction and analyses chemistry, crime scenes analyses and automation. These changes create further demands on applied research and development which can be fulfilled by graduates of this program by working in applied research and development either as a part of university system or private industry.*

*I have read the concept paper for this program. Besides interdisciplinary nature of the program, I like the idea of an advanced laboratory techniques course because the private and government laboratories are looking for basic laboratory analytical, critical-thinking and problem solving skills (a key weakness I have noticed in hundreds of job applications of graduates). I also like the quality assurance component of your program that is the key to any forensic casework. I strongly support this interdisciplinary program with emphasis on forensic science and providing a better career options for graduates in skilled and better-paid job market”*

Amarjit Chahal, Ph.D  
Forensic Specialist/Technical Leader/Business Development Manager  
Orchid PRO-DNA

*“The curriculum represents a solid foundation in basic/life sciences combined with specialized skills that will equip graduates to work in a variety of applied careers. These would include work in the forensic science field, other accredited labs, or specialized law enforcement. The degree would also provide an intriguing and desirable foundation for those considering post-graduate degrees including law or medicine.*

*The proposed new joint degree would provide individuals with an interest in science, technology, the law and critical applied skills yet another valuable opportunity to attain a practical and engaging education with a view to a rewarding career.”*

Lisa Lapointe  
Chief Coroner

British Columbia Coroners Service  
&  
Chair of the Program Advisory Committee  
BCIT Forensic Science and Technology Program

*“The program as proposed is solidly science based and includes an Honours thesis, as required for any forensic science career and includes courses in law, expert witness testimony, ethics, technical writing and management training, all of which would be valuable in a forensic science career.*

*The proposers intend to seek accreditation from the Forensic Science Education Programs Accreditation Commission (FEPAC) through the American Academy of Forensic Sciences, once the two year probationary period is completed, which will make graduates competitive around the world. No such similar program exists in British Columbia.*

*We support this initiative as it will provide graduates with training in one of the fastest growing areas of forensic science.”*

Gail Anderson Ph.D, D-ABFE  
Co-Director, Centre for Forensic Research  
Professor, School of Criminology  
Simon Fraser University

and

Hugo Cardoso, PhD  
Co-Director, Centre for Forensic Research  
Assistant Professor, Department of Archaeology  
Simon Fraser University

*“The content would easily meet the FBI DNA QAS [Quality Assurance Standards] requirements for DNA Analysts”*

Gary Shutler, Ph.D  
DNA Technical Leader /Manager  
Washington State Patrol  
Forensic Laboratory Services Bureau  
&  
Previous Member  
Scientific Working Group for DNA Analysis Methods

*“Based on the proposed curriculum, we feel that this program will adequately train students to the level required in order to be competitive for various positions within*

*our organization (including Forensic DNA and Forensic Equine Drug Testing Departments). We feel that a program of this nature will provide students with the right type of skills and knowledge required in order to pursue a number of career options in the area of Forensic Science. Furthermore, we look forward to the development of this program as it will provide the necessary training one needs in order to be well equipped to work in this field”.*

Sandrine Merette, Ph.D  
Laboratory Supervisor  
Forensic Equine Drug Testing Department  
Maxxam

As Dr. Chahal, Lisa Lapointe, Dr. Anderson, and Dr. Cardoso describe, a strength of the proposed program is its interdisciplinary nature with a solid science foundation, applied education in forensic science, and opportunity for experience in research with the Honours Thesis. Dr. Anderson and Dr. Cardoso also point out that, since our curriculum has been designed to meet the standards of the Forensic Science Education Programs Accreditation Commission, this will open up international employment opportunities for our graduates. Dr. Shutler further confirms that this proposed program would meet the educational requirements of the FBI for individuals to work as a DNA Analyst in an accredited laboratory in the United States. We envision that this program will give our graduates an advantage over graduates of other forensic science programs and will open up national and international opportunities in government forensic labs and private forensic labs or advanced education opportunities including in the area of forensic science.

Since this program will be co-delivered by BCIT's Forensic Science and Technology Department and UBC's Department of Biochemistry and Molecular Biology, a significant amount of cooperation and coordination has already occurred. Both departments are committed to working together to ensure the success of the proposed program. In addition, a number of possible advanced education opportunities at UBC include laddering into a master's or PhD in the Department of Biochemistry and Molecular Biology or into a professional school such as the Faculty of Medicine, Faculty of Dentistry, or the Sauder School of Business.

*“The UBC Department of Biochemistry and Molecular Biology is excited to partner with the BC Institute of Technology's Forensic Science and Technology Department to develop and deliver a joint Bachelor of Science (Honours) degree program in Biochemistry and Forensic Science. This initiative arose from joint discussions that began nearly five years ago and has attracted wide support within the Department of Biochemistry and Molecular Biology and substantial input from many faculty members. Particularly encouraging has*

*been the very strong feedback from surveys of opinions of current and former students.*

*Upon approval and development this joint program will be a recognized Honours Bachelor of Science at UBC providing students with excellent ladder opportunities including the ability to continue into graduate studies at the Master or Doctoral level in the Department of Biochemistry and Molecular Biology and indeed in other graduate programs in the life sciences. This program will also provide the foundation for students to be qualified to apply for entry into professional programs at UBC or elsewhere, including Medicine, Dentistry and Law.”*

Roger W. Brownsey, PhD  
Professor and Program Head  
Biochemistry and Molecular Biology  
University of British Columbia

The findings from the surveys, industry interviews, and letters of support strongly support the proposed program's aim and goals. For more information, see the Needs Assessment Report (Appendix 7).

## 11 Program Review and Assessment

To ensure the ongoing currency of the new program and the quality of its learning outcomes, BCIT must provide evidence that the program review and assessment procedure is in place. This section describes BCIT's policy and procedures for program review and assessment.

### 11.1 BCIT Program Review and Assessment

BCIT and UBC are committed to developing and maintaining high quality educational programs and to the ongoing renewal of those programs. BCIT systematically reviews and assesses its programs for quality, currency, and relevance to stakeholder needs. Most programs will be on a five-year cycle for program review. The Forensic Science and Technology department has recently completed a program review (2013-14) of its Bachelor of Technology and Advanced Certificate programs with favorable results and support. Data from the program reviews has not only been used in developing this proposed program but has also shown the need for this proposed program. The procedure for reviewing and assessing the proposed program is documented in BCIT's Program Review Policy 5402 (<http://www.bcit.ca/files/pdf/policies/5402.pdf>) and Program Review Procedure 5402 ([http://www.bcit.ca/files/pdf/policies/5402\\_pr1.pdf](http://www.bcit.ca/files/pdf/policies/5402_pr1.pdf)). Briefly, the process involves:

- An internal self-study report written by the program area, incorporating data, analysis, and resulting recommendations
- An external review including a site visit, to validate the findings of the self-study report
- A final report, incorporating input from the external review team
- An institutional response, by way of a presentation of final recommendations and action plan to Education Council
- A one-year status update at Education Council, presenting on the status of implementing the recommendations.

### 11.2 Internal Review

BCIT's program review policies will facilitate the formative and summative review of this program every five years to ensure the quality and currency of the new program's learning outcomes. Staff from both BCIT and UBC comprising the program's School Working Group will be involved in the program review and curriculum review of this program.

### 11.3 External Review

BCIT's Board of Governors establishes a Program Advisory Committee (PAC) for each academic program. The program will receive advice and input from the PAC, which is constituted to provide strategic advice and assistance to the program and provide guidance to enable the program to meet projected future needs of employers. The PAC involvement ensures that changing skills, abilities, and knowledge required by employers

are reflected in the program. The PAC also provides input and guidance in the conduct of program reviews and endorses by motion the results of a program review.

Membership in the PAC comprises an appropriate cross-section of representation from employers, alumni, the professions, and other industry representatives. Meetings are scheduled no less than twice a year.

Each PAC submits a written annual report to the Board of Governors outlining major accomplishments and recommendations for program improvement, as well as an annual self-evaluation of the PAC's effectiveness and utility. For more details about PACs, see BCIT Policy 5404 (<http://www.bcit.ca/files/pdf/policies/5404.pdf>).

# 12 Category 1 Proposal Form: Create New Course Code

## UBC Curriculum Proposal Form

### Change to Course or Program

#### Category: 1

<b>Faculty:</b> Medicine <b>Department:</b> Biochemistry and Molecular Biology <b>Faculty Approval Date:</b> November 2, 2016	<b>Date:</b> September 23, 2015 <b>Contact Person:</b> Warren Williams <b>Phone:</b> 604-822-8729 <b>Email:</b> wwarren@mail.ubc.ca
<b>Effective Date for Change:</b> 17S  <b>Proposed Calendar Entry:</b>  Courses by Subject Code  AANB: Applied Animal Biology  ...  FRST: Forestry  <b>FSCT: Biochemistry and Forensic Science</b>  GBPR: Green Bioproducts  ...	<a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code</a> <b>Present Calendar Entry:</b>  Courses by Subject Code  ANB: Applied Animal Biology  ...  FRST: Forestry    GBPR: Green Bioproducts  ...  <b>Action:</b> Create new course code  <b>Rationale:</b> The Faculty of Medicine proposes a new course code to identify required courses within the new Bachelors of Science Combined Honours in Biochemistry and Forensic Science. A new UBC course code is needed to reflect the courses taken at British Columbia Institute of Technology for students in this specialization.



**Category 2**

<b>Faculty:</b> Medicine <b>Department:</b> Biochemistry and Molecular Biology <b>Faculty Approval Date:</b> November 2, 2016	<b>Date:</b> September 23, 2015 <b>Contact Person:</b> Warren Williams <b>Phone:</b> 604-822-8729 <b>Email:</b> wwarren@mail.ubc.ca
<b>Effective Date for Change:</b> 17S  <b>Proposed Calendar Entry:</b>  Courses by Subject Name  ADHE    Adult and Higher Education  ...  FRST    Forestry  <b>FSCT    Biochemistry and Forensic Science</b> ...	<a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name</a> <b>Present Calendar Entry:</b>  Courses by Subject Name  ADHE    Adult and Higher Education  ...  FRST    Forestry  ...  <b>Action:</b> Add new course name.  <b>Rationale:</b> The Faculty of Medicine proposes a new course name to identify required courses within the new Bachelors of Science Combined Honours in Biochemistry and Forensic Science. A new UBC course name is needed to reflect the courses taken at British Columbia Institute of Technology for students in this specialization.

**Category: 2**

<b>Faculty:</b> Medicine <b>Department:</b> Biochemistry and Molecular Biology <b>Faculty Approval Date:</b> November 2, 2016	<b>Date:</b> September 23, 2015 <b>Contact Person:</b> Warren Williams <b>Phone:</b> 604-822-8729 <b>Email:</b> wwarren@mail.ubc.ca
<b>Effective Date for Change:</b> 17S  <b>Proposed Calendar Entry:</b>  Faculty of Science  ASIC Arts and Science Interdisciplinary Courses  ...  FISH Fisheries Research  <b>FSCT Biochemistry and Forensic Science</b>  GSAT Genome Science and Technology ...	<a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;institution=12">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;institution=12</a> <b>Present Calendar Entry:</b>  Faculty of Science  ASIC Arts and Science Interdisciplinary Courses  ...  FISH Fisheries Research  GSAT Genome Science and Technology ...  <b>Action:</b> Add new course code/name to Faculty of Science page in the calendar.  <b>Rationale:</b> The Faculty of Medicine proposes a new course code and name to identify required courses within the new Bachelors of Science Combined Honours in Biochemistry and Forensic Science. A new UBC course name is needed to reflect the courses taken at British Columbia Institute of Technology for students in this specialization.

# 13 Category 1 Proposal Form: Create New Program

## UBC Curriculum Proposal Form

### Change to Course or Program

#### Category: 1

<b>Faculty:</b> Medicine <b>Department:</b> Biochemistry and Molecular Biology <b>Faculty Approval Date:</b>	<b>Date:</b> September 20, 2015 <b>Contact Person:</b> Warren Williams <b>Phone:</b> 604-822-8729 <b>Email:</b> wwarren@mail.ubc.ca
<b>Effective Date for Change:</b> 17S  <b>Proposed Calendar Entry:</b>  <b>Forensic Science</b>  <p>The Department of Biochemistry and Molecular Biology [link to: <a href="http://biochem.ubc.ca/">http://biochem.ubc.ca/</a>] at the University of British Columbia and the Forensics Science and Technology department [link to: <a href="http://www.bcit.ca/cas/forensics/">http://www.bcit.ca/cas/forensics/</a>] at the BC Institute of Technology (BCIT) offer a four-year joint degree program that integrates academic study at both institutions. Enrolment is limited. Entry into the specialization is at the second-year level and requires completion of the first-year prerequisites listed below with at least the minimum admission average set by the UBC Faculty of Science for transfer into second year Honours specializations.</p> <p>Students normally apply for this specialization through the UBC science online second year specialization selection process [link to: <a href="https://science.ubc.ca/students/degree/apply">https://science.ubc.ca/students/degree/apply</a>]. Students transferring from other specializations, year levels, or other institutions should see a UBC biochemistry adviser. Applicants should also be aware that most careers in Forensic Science require criminal background checks.</p> <p>The first year of the specialization is completed at UBC. Transfer students who have completed their first year at another institution may also apply to the program. All subsequent years will be taken at both UBC and BCIT, requiring students to commute between the two campuses (scheduling will reflect travel time). Students must meet the Faculty of Science requirement to continue in this</p>	<b>NEW PAGE (URL) REQUIRED</b>  <b>Present Calendar Entry:</b>          <p><b>Action:</b> Add a new page in the calendar for Forensic Science and the Combined Honours (XXXX): Biochemistry and Forensic Science specialization.</p> <p>Create new specialization and specialization code.</p> <p><b>Rationale:</b> This will provide a section under the Faculty of Science in the calendar where students will be able to find information on the new joint UBC/BCIT Combined Honours in Biochemistry and Forensic Science. A separate entry under Forensic Science makes it easier for students to find the specialization.</p> <p>The mission of this joint B.Sc. (Combined Honours) is to combine the strengths of the UBC biochemistry department and the BCIT Forensics Science and Technology department to provide our students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science and to provide students with job ready skills and abilities to become the future leaders of the forensic science</p>

**Honours specialization (see Honours Specialization [link to: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,404#1611>] requirements).**

**Completion of the requirements for the entire four-year specialization earns a Bachelor of Science (Combined Honours) in Biochemistry and Forensic Science. The credential is awarded jointly by UBC and BCIT. Students who fail to maintain the Faculty of Science requirements for continuing in honours specializations, or who elect not to complete the joint program, but who wish to enrol in a different specialization within the Faculty of Science must apply to receive transfer credit for completed BCIT credits to have the BCIT credits counted towards a new specialization.**

**Combined Honours (XXXX): Biochemistry and Forensic Science**

#### **First Year Credits**

<b>Communication Requirement<sup>1</sup></b>	<b>6</b>
<b>BIOL 121,140<sup>2</sup></b>	<b>5</b>
<b>CHEM 121 (or 111)</b>	<b>4</b>
<b>CHEM 123</b>	<b>4</b>
<b>MATH 100 or 102 or 104<sup>3</sup></b>	<b>3</b>
<b>MATH 101 or 103 or 105<sup>4</sup></b>	<b>3</b>
<b>PHYS 101, 118, and 119<sup>5</sup></b>	<b>7</b>
<b>Electives<sup>6</sup></b>	<b>2</b>
<b>Total Credits</b>	<b>34</b>

#### **Second Year at UBC campus**

<b>BIOC 203<sup>7</sup></b>	<b>3</b>
<b>BIOL 200</b>	<b>3</b>
<b>BIOL 234<sup>8</sup></b>	<b>3</b>
<b>CHEM 203<sup>9</sup></b>	<b>4</b>
<b>CHEM 213, 245</b>	<b>4</b>
<b>CHEM 211</b>	<b>4</b>
<b>STAT 200</b>	<b>3</b>
<b>Total Credits</b>	<b>24</b>

#### **Second Year at BCIT campus**

<b>FSCT280, 290</b>	
<b>Total Credits</b>	<b>9</b>

#### **Third Year at UBC campus**

<b>BIOC 303<sup>7</sup></b>	<b>6</b>
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and biochemistry industries.

Graduates will be proficient at working in a laboratory setting and will have gained important critical-thinking and analytical skills. In addition, graduates will have conducted both academic and applied research, conducted forensic testing, and will be able to communicate their results effectively. Graduates will also have gained knowledge of the accredited laboratory environment, which will help expand their employability beyond accredited forensic laboratories.

Upon completion of this credential, graduates will have the skills, knowledge, and ability to:

- Demonstrate a comprehensive understanding of biochemistry, molecular biology, chemistry, and forensic science, including the main principles, techniques, and latest developments.
- Perform with confidence a variety of laboratory procedures relevant to biochemistry, molecular biology, chemistry, and forensic science including the ability to operate analytical instruments.
- Apply and maintain quality assurance processes and safety standards in a scientific laboratory.
- Design and conduct research independently and in a team environment.
- Communicate complex scientific information and evidentiary findings in oral and written formats for academic or legal purposes.
- Apply critical-thinking, analytical, and problem-solving skills to the disciplines of biochemistry, molecular biology, chemistry, and forensic science.
- Demonstrate the communication and interpersonal skills needed to work effectively in a team environment.
- Develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science.
- Exemplify the highest ethical standards and professional principles.

The curriculum was developed to enable the program to meet the educational requirements of FEPAC

<b>BIOC 301</b>	<b>3</b>	(Forensic Science Education Programs Accreditation Commission: <a href="http://fepac-edu.org/">http://fepac-edu.org/</a> ), which was established by the American Academy of Forensic Sciences.
<b>BIOL 335</b>	<b>3</b>	
<b>Electives<sup>6</sup></b>	<b>3</b>	
<b>Total Credits</b>	<b>15</b>	
<b>Third year at BCIT campus</b>		
<b>FSCT380, 390</b>		
<b>Total Credits</b>	<b>18</b>	
<b>Fourth Year at UBC campus</b>		
<b>BIOC 402, 410</b>	<b>6</b>	
<b>ONE of BIOC 403, 440, 450, 460</b>	<b>3</b>	
<b>BIOC research option<sup>10</sup></b>	<b>6</b>	
<b>Electives</b>	<b>3</b>	
<b>Total Credits</b>	<b>18</b>	
<b>Fourth Year at BCIT campus</b>		
<b>FSCT480, 490</b>		
<b>Total Credits</b>	<b>14</b>	
<b>Total Credits for Degree</b>	<b>132</b>	
<sup>1</sup> A total of 6 credits of coursework is required to meet the Communication Requirement. For a full list of acceptable courses, see Communication Requirement.		
<sup>2</sup> If students do not have Biology 11 or Biology 12, then they must also take BIOL 111 or BIOL 112, in addition to BIOL 121 and BIOL 140.		
<sup>3</sup> MATH 180 or 184 or 120 may substitute for any of the specified differential calculus courses listed by decreasing the electives in a later year by 1 credit. MATH 110 may substitute for any of the specified differential calculus courses listed by decreasing the electives in later years by 3 credits.		
<sup>4</sup> MATH 121 may substitute for any of the specified integral calculus courses listed by decreasing the electives in a later year by 1 credit.		
<sup>5</sup> Students lacking Physics 12 must take PHYS 100 before taking any other 100-level PHYS course, using PHYS 100 as an elective. PHYS 117 is an acceptable substitute for PHYS 101. PHYS 108 &		

**109 are acceptable substitutes for PHYS 118 and 119. Students are encouraged to complete this specialization requirement in their first year.**

**<sup>6</sup> Electives must be taken to ensure the Faculty of Science Arts Requirement is met. Note that any extra elective credit taken in the first, second or third years can be applied to later elective credit requirements. Note that students in honours specializations must complete a minimum of 30 credits in each Winter Session.**

**<sup>7</sup> Students with a mark of 76% or higher in BIOL 201 or BIOC 202 may apply for admission to the biochemistry specializations and will be allowed to use these courses in place of BIOC 203. However, BIOC 203 is the preferred route into biochemistry specializations.**

**<sup>8</sup> Students with a mark of 70% or higher in BIOL233 may use BIOL233 in place of BIOL234.**

**<sup>9</sup> Students with CHEM 235 and a mark of 76% or higher in CHEM 233 may apply for admission to this specialization and will be allowed to use CHEM 233 and 235 in place of CHEM 203.**

**<sup>10</sup> Students may choose from either a) BIOC 449 or b) BIOC420 and ONE of BIOC 403, 440, 450 or 460. Please note that BIOC 403, 440, 450 or 460 cannot be double counted. If a student uses one of these courses to complete their specialization requirements, they cannot use the same course to fulfill their biochemistry research option.**

**Category 2**

<b>Faculty:</b> Medicine <b>Department:</b> Biochemistry and Molecular Biology <b>Faculty Approval Date:</b> November 2, 2016	<b>Date:</b> September 23, 2015 <b>Contact Person:</b> Warren Williams <b>Phone:</b> 604-822-8729 <b>Email:</b> wwarren@mail.ubc.ca
<b>Effective Date for Change:</b> 17S  <b>Proposed Calendar Entry:</b>  Bachelor of Science  Contents  Introduction to Degree Options  ...  Environmental Sciences  <b>Forensic Science</b>  General Science  ...	<a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tre=12,215,410,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tre=12,215,410,0</a> Present Calendar Entry:  Bachelor of Science  Contents  Introduction to Degree Options  ...  Environmental Sciences   General Science  ...  Action: Add Forensic Science to the list under the Faculty of Science.  Rationale: This will provide a section under the Faculty of Science in the calendar where students will be able to find information on the joint UBC/BCIT Combined Honours in Biochemistry and Forensic Science.

**Category 2**

<b>Faculty:</b> Medicine <b>Department:</b> Biochemistry and Molecular Biology <b>Faculty Approval Date:</b> November 2, 2016	<b>Date:</b> September 23, 2015 <b>Contact Person:</b> Warren Williams <b>Phone:</b> 604-822-8729 <b>Email:</b> wwarren@mail.ubc.ca
<b>Effective Date for Change:</b> 17S  <b>Proposed Calendar Entry:</b>  Biochemistry  The Department of Biochemistry and Molecular Biology offers opportunities for study leading to bachelor's, master's and doctoral degrees. For information on advanced degrees, see graduate Biochemistry and Molecular Biology. ...  Combined Honours (0565): Biochemistry and Chemistry (BIOC, CHEM) ...  <b>Combined Honours (XXXX): Biochemistry and Forensic Science</b>  <b>See Forensic Science [Link to new URL]</b>  Minor (1184): Biochemistry (BIOC) ...	<a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tre=12,215,410,417">http://www.calendar.ubc.ca/vancouver/index.cfm?tre=12,215,410,417</a> <b>Present Calendar Entry:</b>  Biochemistry  The Department of Biochemistry and Molecular Biology offers opportunities for study leading to bachelor's, master's and doctoral degrees. For information on advanced degrees, see graduate Biochemistry and Molecular Biology. ...  Combined Honours (0565): Biochemistry and Chemistry (BIOC, CHEM) ...  Minor (1184): Biochemistry (BIOC) ...  <b>Action:</b> Add the Combined Honours (XXXX): Biochemistry and Forensic Science to the Biochemistry page in the calendar. Add link to new Forensic Science page.  <b>Rationale:</b> A new page has been added in the Calendar for Forensic Science with the entire joint UBC/BCIT Combined Honours (XXXX): Biochemistry and Forensic Science specialization. We are adding the name of the specialization and a link under Biochemistry in the Calendar to provide a secondary way for students to find the specialization.



## 14 Category 2 Proposal Form: Courses

Biochemistry and Forensic Science, Faculty of Science

FSCT: Biochemistry and Forensic Science

The following courses are restricted to students enrolled in the Joint Degree Combined Honours Bachelor of Science in Biochemistry and Forensic Science. They are taught at the British Columbia Institute of Technology (BCIT) campus and show on the BCIT transcript under the BCIT course numbers.

FSCT 201 (3) Introduction to Forensic Science

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7320.

FSCT 202 (3) Applied Ethics

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT LIBS 7002.

FSCT 203 (3) Report Writing and Communication for Forensic Investigation

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT COMM 7200.

FSCT 280 (0) Introductory Forensic Science 1

Block registration for the introduction to forensic science course taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Credit limited to students in the Joint Degree Program.

FSCT 290 (0) Introductory Forensic Science 2

Block registration for the applied ethics and report writing and communication for forensic investigation courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Credit limited to students in the Joint Degree Program.

FSCT 301 (3) Forensic Biology: DNA Typing Theory

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8150.

FSCT 302 (3) Quality Assurance for Forensic Science

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8370.

FSCT 303 (3) Business Management for Forensic Science

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8371.

FSCT 310 (3) Research Methodology and Measurement Models

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7910.

FSCT 311 (3) Forensic Biology: Evidence Recovery

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8155.

FSCT 312 (3) Medical-Legal Aspects of Alcohol

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8230.

FSCT 313 (3) Crime Scene Investigation

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7310.

FSCT 314 (3) The Science of Fingerprints- Theory

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8320.

FSCT 315 (3) Forensic Toxicology 1

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8240.

FSCT 380 (0) Intermediate Forensic Science 1

Block registration for the forensic biology: DNA typing theory, quality assurance, and business management for forensic science courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Credit limited to students in the Joint Degree Program.

FSCT 390 (0) Intermediate Forensic Science 2

Block registration for the forensic biology: evidence recovery, research methodology, and elective courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Credit limited to students in the Joint Degree Program.

FSCT 401 (3) Forensic Biology: DNA Typing Applications

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8160.

FSCT 409 (3) Law for Forensic Science

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7009.

FSCT 410 (2) The Expert Witness: Prepared for Court

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7010.

FSCT 411 (3) Population Genetics

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8305.

FSCT 412 (3) Forensic Chemistry and Toxicology

Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8156.

FSCT 480 (0) Advanced Forensic Science 1

Block registration for the forensic biology: DNA typing applications, law and forensic science courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Credit limited to students in the Joint Degree Program.

FSCT 490 (0) Advanced Forensic Science 2

Block registration for the expert witness testimony, population genetics, and forensic chemistry and toxicology courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Credit limited to students in the Joint Degree Program.



<p><b>report writing and communication for forensic investigation courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</b></p> <p><b>FSCT 301 (3) Forensic Biology; DNA Typing Theory</b> <b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8150.</b></p> <p><b>FSCT 302 (3) Quality Assurance for Forensic Science</b> <b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8370.</b></p> <p><b>FSCT 303 (3) Business Management for Forensic Science</b> <b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8371.</b></p> <p><b>FSCT 310 (3) Research Methodology and Measurement Models</b> <b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7910.</b></p> <p><b>FSCT 311 (3) Forensic Biology: Evidence Recovery</b> <b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8155.</b></p> <p><b>FSCT 312 (3) Medico-legal Aspects of Alcohol</b> <b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8230.</b></p> <p><b>FSCT 313 (3) Crime Scene Investigation</b> <b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7310.</b></p> <p><b>FSCT 314 (3) The Science of Fingerprints – Theory</b> <b>Credit limited to students in the Joint Degree</b></p>	
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<p><b>Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8320.</b></p> <p><b>FSCT 315 (3) Forensic Toxicology 1</b> Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8240.</p> <p><b>FSCT 380 (0) Intermediate Forensic Science 1</b> Block registration for the forensic biology: DNA typing theory, quality assurance, and business management for forensic science courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</p> <p><b>FSCT 390 (0) Intermediate Forensic Science 2</b> Block registration for the forensic biology: evidence recovery, research methodology, and elective courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</p> <p><b>FSCT 401 (3) Forensic Biology: DNA Typing Applications</b> Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8160.</p> <p><b>FSCT 409 (3) Law for Forensic Science</b> Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7009.</p> <p><b>FSCT 410 (2) The Expert Witness – Prepared for Court</b> Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7010. [2-0-0]</p> <p><b>FSCT 411 (3) Population Genetics</b> Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8305.</p> <p><b>FSCT 412 (3) Forensic Chemistry and Toxicology</b> Credit limited to students in the Joint Degree</p>	
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<p><b>Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8156.</b></p> <p><b>FSCT 480 (0) Advanced Forensic Science 1</b> <b>Block registration for the forensic biology: DNA typing applications, law and forensic science courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</b></p> <p><b>FSCT 490 (0) Advanced Forensic Science 2</b> <b>Block registration for the expert witness testimony, population genetics, and forensic chemistry and toxicology courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</b></p>	
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 280 (0) Introductory Forensic Science 1</b></p> <p><b>Block registration for the introduction to forensic science course taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>FSCT 280 is a "placeholder" course worth 0 credit to indicate that a student in this joint Combined Honours specialization is taking courses at BCIT in the fall term of their second year. Specifically, students registered into FSCT 280 would be registered into BCIT's FSCT 7320 (FSCT 201): Introduction to Forensic Science.</p> <p>For more information about FSCT 7320 (FSCT 201), please see the UBC course proposal for FSCT 201.</p> <p>Please note that the course listed in parenthesis represents the UBC shadow course of the original BCIT course. Students would not register into this UBC shadow course.</p>



## UBC Curriculum Proposal Form

### Change to Course or Program

Category: 2

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 201 (3) Introduction to Forensic Science</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7320.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>In year two of this joint degree, this course along with BIOC 203 (Fundamentals of Biochemistry) course prepare students well for their forensic science and biochemistry courses that will make up the majority of their third and fourth years classes. This course will provide students with an opportunity to meet and network with other students in this program for the first time. In addition, students will learn about the various disciplines of forensic sciences directly from individual subject matter experts who will provide seminar style presentations on a weekly basis. Students will discover the true breadth of forensic science which will allow them to</p>

envision the specific forensic science elective courses they would like to take in third year. In addition, students will learn the foundational theories of forensic science including scientific methodology, the ACE principle (analysis, comparison, and evaluation), and evidence continuity. These foundational theories will follow them throughout their time in the program and into their career in the forensic science. The course material will be delivered in the classroom with the instructor and will involve presentations by forensic science experts from the following fields: forensic DNA; forensic entomology; forensic anthropology; forensic identification and death investigation; forensic video analysis; forensic toxicology, and digital forensics.

After development this program is planning on applying for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC) which will assure potential students and employers that this joint BCIT-UBC degree is providing a high-level forensic science education that will produce top-quality forensic science graduates. This course will help to deliver two of the curriculum requirements of FEPAC including the need to provide students with a survey of forensic science and expose them to professional practice. This course is currently offered in the Forensic Science and Technology program at BCIT.

This is a shadow course of BCIT's FSCT 7320. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.

### UBC Curriculum Proposal Form Change to Course or Program

**Category: 2**

<b>Faculty:</b> Medicine  <b>Department:</b> Biochemistry and Molecular Biology  <b>Effective Date for Change:</b> 17S	<b>Date:</b> September 23, 2015  <b>Contact Person:</b> Warren Williams  <b>Phone:</b> 604-822-8729  <b>Email:</b> wwarren@mail.ubc.ca
<b>Proposed Calendar Entry:</b>  <p><b>FSCT 290 (0) Introductory Forensic Science 2</b></p> <p><b>Block registration for the applied ethics and report writing and communication for forensic investigation courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</b></p>	<b>Present Calendar Entry:</b>  None (New Course)  <b>Type of Action:</b> Create new course.  <b>Rationale:</b>  <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>FSCT 290 is a "placeholder" course worth 0 credit to indicate that a student in this joint Combined Honours specialization is taking courses at BCIT in the winter term of their second year. Specifically, students registered into FSCT 290 would be registered into BCIT's LIBS 7002 (FSCT 202) and COMM 7200 (FSCT 203).</p> <p>For more information about LIBS 7002 and COMM 7200, please see the UBC course proposals for FSCT 202 and 203.</p> <p>Please note that the course listed in parenthesis represents the UBC shadow course of the original BCIT course. Students would not register into these UBC shadow courses.</p>

### UBC Curriculum Proposal Form Change to Course or Program

**Category: 2**

<b>Faculty:</b> Medicine  <b>Department:</b> Biochemistry and Molecular Biology  <b>Effective Date for Change:</b> 17S	<b>Date:</b> September 23, 2015  <b>Contact Person:</b> Warren Williams  <b>Phone:</b> 604-822-8729  <b>Email:</b> wwarren@mail.ubc.ca
<b>Effective Date for Change:</b>  <b>Proposed Calendar Entry:</b>  <b>FSCT 202 (3) Applied Ethics</b>  <b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT LIBS 7002.</b>	<b>Present Calendar Entry:</b>  None (New Course)  <b>Type of Action:</b> Create new course.  <b>Rationale:</b> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>When conducting a laboratory analysis, report writing, or giving expert witness testimony, the forensic scientist must stay within their area of expertise and not extend themselves beyond their professional expertise in an unethical manner. In rare cases when forensic scientists act in an unethical way they destroy the public confidence in the criminal justice system and their report or testimony may convict innocent individuals. These cases also result in expensive and lengthy review of case files and potentially new trails. As such, this joint program in Biochemistry and Forensic Science will stress the importance of ethical standards and professional</p>

	<p>principles throughout the curriculum.</p> <p>This Applied Ethics course, delivered by the BCIT Liberal Studies Department in the second year of the program, will help students to make ethical and professional decisions, develop skills in logical analysis, and expose them to professional codes of conduct. All of the forensic science industry we surveyed (N=41) indicated that ethics and professionalism were essential or very useful to work in their area of expertise. In addition, ethics is a curriculum requirement for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC) and this course satisfies the BCIT General Education requirement of having an applied ethics course (BCIT Policy 5401-PR1). Students will be eligible to take this Applied Ethics course online or in a classroom setting.</p> <p>This is a shadow course of BCIT's LIBS 7002. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Effective Date for Change:</b></p> <p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 203 (3) Report Writing and Communication for Forensic Investigation</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT COMM 7200.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>This course will be developed jointly by BCIT's Forensic Science and Technology and Communication departments and will be designed specifically for the forensic science industry. This course will focus on technical communication skills, methods to write effective reports and workplace communication (emails, memos, CVs, cover letters, etc.). This course will familiarize students with the differences between analytical, investigation, and research reports. Students will also have an opportunity to improve their oral presentation skills by conducting a video analysis and reflection of their performance.</p>

Forensic scientists require unique skill sets. They operate in two environments: the professional laboratory/professional setting (requiring highly technical report writing and communication skills) and the legal setting (requiring conversion of technical concepts to written and oral forms so that judges, lawyers and jurors can understand them). Over 97% of the forensic science industry that we surveyed (N=41) indicated that verbal and written communication skills were essential or very useful to work in their area of expertise.

This course will build on the skills that the students learn in their first year English courses at UBC by providing the students with forensic relevant oral and written communication skills. This course will help students to write technical reports for the 3<sup>rd</sup> and 4<sup>th</sup> year forensic science courses and will also help students to write their 4<sup>th</sup> year Biochemistry Combined Honours Thesis or the laboratory reports required in the Advanced Biochemical Techniques course. In addition, the oral presentation and reflection portion of the course will help students during their expert witness testimony course in fourth year of the program where students will have to convey technical forensic terms and techniques in a clear and concise manner so that a judge or jury of lay individuals will understand them.

This is a shadow course of BCIT's COMM 7200. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.

**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 380 (0) Intermediate Forensic Science 1</b></p> <p><b>Block registration for the forensic biology: DNA typing theory, quality assurance, and business management for forensic science courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>FSCT 380 is a "placeholder" course worth 0 credit to indicate that a student in this joint Combined Honours specialization is taking courses at BCIT in the fall term of their third year. Specifically, students registered into FSCT 380 would be registered into BCIT's FSCT 8150 (FSCT 301), FSCT 8370 (FSCT 302), and FSCT 8371 (FSCT 303).</p> <p>For more information about BCIT's FSCT 7150, 8370 and 8371, please see the UBC course proposals for FSCT 301, 302, and 303.</p> <p>Please note that the course listed in parenthesis represents the UBC shadow course of the original BCIT course. Students would not register into these UBC shadow courses.</p>



**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 301 (3) Forensic Biology: DNA Typing Theory</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8150.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>In year three of this joint degree, this course will be the first of three forensic DNA courses that students will take in this program. This online course will provide the students with the theory upon which they can build upon in the biological evidence recovery course and DNA typing applications course. This course follows the logical progression of real forensic DNA case as there is a module for each step of the process that provides students with the theoretical knowledge they need, and then, through the use of discussions and assignments, shows the students the practical application of that knowledge. Following this course the Forensic Biology: DNA Applications (FSCT 401) course will provide the students with applied learning opportunities by having them process a mock case from DNA extraction to the production of and interpretation of</p>

	<p>a DNA profile.</p> <p>These three forensic DNA courses (theory, evidence recovery, and applications), the statistics and population genetics courses, and the biochemistry specialization will ensure that the graduates of this program are well qualified for jobs in the forensic DNA/biology discipline. While students may choose to work in other areas of forensic science or investigation, feedback from the needs assessment indicate that graduates of this program will qualify for employment in the biology section of forensic science labs both nationally and internationally.</p> <p>This is a shadow course of BCIT's FSCT 8150. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 302 (3) Quality Assurance for Forensic Science</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8370.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>The recent report by the National Research Council (NRC) report titled “Strengthening Forensic Science in the United States: A Path Forward” (2009) has described the importance of laboratory accreditation, recommended additional training for forensic scientists and highlighted the importance of quality assurance. Recently (2012) there was a multidisciplinary report inspired by the NRC report titled “Forensic Science in Canada” that evaluated the current state of forensic science in Canada. Recommendations from this report included the need for educational institutions to develop forensic research programs and the need for further education in report writing, courtroom testimony, and quality</p>

	<p>assurance.</p> <p>This Quality Assurance course will be a new course that will be developed by BCIT's Forensic Science and Technology department and will be designed specifically for the forensic science industry and those working in an accredited laboratory. This course will familiarize students with the best quality assurance and control practices by having the students complete numerous practical exercises. In addition, students will conduct an internal audit at the end of this course which will involve interviewing lab personnel, finding audit evidence and writing and presenting an audit report.</p> <p>Knowledge of quality assurance principles will help our students find jobs and excel in their future careers in an accredited laboratory (either forensic or other). Over 85% of the forensic science industry (N= 41) and over 95% of the biochemistry related industry (N= 21) that we surveyed indicated that an understanding of laboratory quality assurance processes would be essential, very useful or somewhat useful to work in job. After development this program is planning on applying for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC). This course will deliver the quality assurance curriculum requirement of FEPAC. In addition, as none of the other B.Sc. programs in Forensic Science in Ontario currently contain a course in quality assurance, this course will help our program stand out to forensic science employers.</p> <p>This is a shadow course of BCIT's FSCT 8370. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 303 (3) Business Management for Forensic Science</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8371.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>This Business Management for Forensic Science course will be a new course that will be developed by BCIT's Forensic Science and Technology department. Management principles such as finance, lean management and change management are crucial principles in the world of business, and recently these concepts have been applied in the forensic science community. As the requests for forensic testing by government agencies and private laboratories continue to increase, these business methods are being utilized to increase the efficiency of lab sample processing, streamlining workflows, reducing case backlogs, improving customer satisfaction, and reducing sampling turnaround</p>

	<p>times. This skillset will set our graduates apart from other forensic science education programs, allow them to transition to management roles at their workplace sooner, and will be useful training for individuals who end up in careers unrelated to forensic science. This course will cover ethics and professional practice relating to forensic science. This course also provides students with important management and leadership skills and satisfies the BCIT General Education requirement of having a course in management principles (BCIT Policy 5401-PR1).</p> <p>This is a shadow course of BCIT's FSCT 8371. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 390 (0) Intermediate Forensic Science 2</b></p> <p><b>Block registration for the forensic biology: evidence recovery, research methodology, and elective courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>FSCT 390 is a "placeholder" course worth 0 credit to indicate that a student in this joint Combined Honours specialization is taking courses at BCIT in the winter term of their third year. Specifically, students registered into FSCT 390 would be registered into BCIT's FSCT 7910 (FSCT 310) and FSCT 8155 (FSCT 311) and three credits of FSCT third year elective (see below).</p> <p>For more information about BCIT's FSCT 7910 and 8155, please see the UBC course proposals for FSCT 310 and 311.</p> <p>In the FSCT third year elective, students can pick ONE of BCIT's FSCT 8230 (FSCT 312), FSCT 7310 (FSCT</p>

	<p>313), FSCT 8320 (FSCT 314), or FSCT 8240.</p> <p>For more information about BCIT's FSCT 8230, 7320, 8320, or 8240, please see the UBC course proposals for FSCT 312, 313, 314, or 315.</p> <p>Please note that the courses listed in parenthesis represents the UBC shadow course of the original BCIT course. Students would not register into these UBC shadow courses.</p>
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**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 310 (3) Research Methodology and Measurement Models</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7910.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b>  The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>In year three of this joint degree, this methodology and measurement course along with the UBC elementary statistics for applications (STAT 200) will help provide students with the skills needed to conduct their Biochemistry Combined Honours Thesis project (BIOC 449) or the Advanced Biochemical Techniques (BIOC 420) course. In this course students will learn theory of inquiry, investigative enquiry, as well as data analysis methods, measurement models, and techniques to effectively report results. The course material will be delivered in a classroom setting and will involve numerous practical exercises involving data gathering and statistical analysis using the SPSS software. The students will also conduct a group research project using all the statistical applications covered in class.</p>

	<p>A number of graduates from this program will go on to work in the area of forensic DNA and this course along with the UBC Biostatistics and the BCIT Population Genetics courses will ensure that the graduates of this program will have the analytical and statistical background to be able to excel in the area of forensic DNA statistics. In addition, the accreditation standards in Canada require staff working in the forensic DNA section of the laboratory to have statistics and/or population genetics courses.</p> <p>This is a shadow course of BCIT's FSCT 7910. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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Change to Course or Program**

**Category: 2**

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<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 311 (3) Forensic Biology: Evidence Recovery</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8155.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>This proposed joint Combined Honours degree is designed to meet the needs of the biochemistry and forensic science industries by graduating students who have a very strong core science education and background along with an applied education in forensic science and biochemistry. This Forensic Biology: Evidence Recovery is a new course that is being developed for the students to take after the FSCT 301 Forensic Biology: DNA Typing Theory and prior to FSCT 401 Forensic Biology: DNA Typing</p>

	<p>Applications course.</p> <p>Students in this course will get hands on experience searching for biological evidence, screening that evidence to identify biological fluids, and recovering that evidence for DNA analysis. Students will also gain an appreciation for proper evidence handling techniques, quality assurance principles, and the importance of maintaining a chain of custody for court. The skillset that this course will provide is vital because it will prepare students to work in the evidence recovery section of a forensic science laboratory which can provide students an entry point into a career in the lab.</p> <p>After development this program is planning on applying for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC). This course will deliver the evidence recovery and microscopy curriculum requirements of FEPAC and provide three of the nine forensic science credits with a laboratory component.</p> <p>This is a shadow course of BCIT's FSCT 8155. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 312 (3) Medico-legal Aspects of Alcohol</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8230.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>This course currently exists in the Forensic Science and Technology program and is being offered as an elective for this new proposed program. Students taking this elective will learn the fundamental pharmacological and physiological effects that alcohol has on the body. The students also conduct practical exercises to collect breath samples with industry specific breath testing instruments, perform roadside testing exercises, and interpret the results to determine if the individual is an impaired driver. This elective would benefit students that are interested in working in the forensic toxicology section of the RCMP laboratory or becoming a police officer after graduating from this program. Students</p>

	<p>that take this elective will also have a greater appreciation of the alcohol analysis laboratory component of the Forensic Chemistry and Toxicology (FSCT 412) course in the fourth year of the program. In addition, students in this course will allow the students to interpretation the blood alcohol concentration results from the perspective of the Defence and Crown Counsel which will provide students with some valuable experience in this area prior to taking the expert witness testimony course in fourth year.</p> <p>This is a shadow course of BCIT's FSCT 8230. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 313 (3) Crime Scene Investigation Credit</b></p> <p><b>limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7310.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>This course currently exists in the Forensic Science and Technology program and is being offered as an elective for this new proposed program. This course will cover all of the major areas of crime scene investigation including the management of the crime scenes, photography, footwear impressions, blood spatter analysis, use of alternate light sources, and fingerprint detection and analysis. This course will be delivered in a hybrid format where the theory is presented online and the in-class components involve the analysis of mock crime scenes (including a final practical examination).</p> <p>This elective would benefit students that are interested in working as a police officer, as a crime scene identification officer, or in a private</p>

	<p>investigation agency. Knowledge of scene management, searching for evidence, alternate light sources and photography are extremely transferable skills required for individuals to work in a forensic science laboratory. Students in this course will get to practice their management and leadership skill which will help to satisfy the management principles curriculum requirement of the BCIT's General Education requirement (BCIT Policy 5401-PR1).</p> <p>This is a shadow course of BCIT's FSCT 7310. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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<p><b>FSCT 314 (3) The Science of Fingerprints -Theory</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8320.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>This course currently exists in the Forensic Science and Technology program and is being offered as an elective for this new proposed program. This course covers the history of fingerprinting, the process in which fingerprints are left and the methods used to recover this important piece of forensic evidence. Students in this course will have opportunities to practice their hands on skills to detect, develop, recover, classify and compare fingerprints from the crime scene to know reference prints.</p> <p>Recently there has been a trend towards creating more civilian positions in forensic identification sections. Previously these positions had been held</p>

	<p>only by sworn police officers however there is a growing trend toward “civilianization” in police agencies who have been hiring civilian Forensic Identification Assistants to assist police Forensic Identification Specialists on crime scenes. This course would benefit students interested in this career path in addition to those interested in becoming a police officer. Students taking this course will also be introduced to the role that a fingerprint expert witness plays in the court system.</p> <p>This is a shadow course of BCIT’s FSCT 8320. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 315 (3) Forensic Toxicology 1</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8240.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>This course currently exists in the Forensic Science and Technology program and is being offered as an elective for this new proposed program. This online course covers the pharmacology, pharmacokinetics and laboratory analysis of the drugs typically found in forensic and death investigation cases. This course will also discuss the methods and benefits of extracting drugs from different types of body fluids or tissues. Students that take this elective will therefore be able to apply this knowledge to the laboratory components of the Forensic Chemistry and Toxicology (FSCT 412) course which is in the fourth year of this program. In addition, the students will further develop their technical communication skills by writing a short essay analyzing the best</p>

	<p>approaches of analyzing a specific drug and gain further appreciation of quality assurance and how it is integrated into a toxicology laboratory. This elective would benefit students that are interested in working in the forensic toxicology section of the RCMP laboratory, the drug analysis lab of Health Canada, or a private analytical chemistry laboratory.</p> <p>This is a shadow course of BCIT's FSCT 8240. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 480 (0) Advanced Forensic Science 1</b></p> <p><b>Block registration for the forensic biology: DNA typing applications, law and forensic science courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>FSCT 480 is a "placeholder" course worth 0 credit to indicate that a student in this joint Combined Honours specialization is taking courses at BCIT in the fall term of their fourth year. Specifically, students registered into FSCT 480 would be registered into BCIT's FSCT 8160 (FSCT 401) and FSCT 7009 (FSCT 409).</p> <p>For more information about BCIT's FSCT 8160 and 7009, please see the UBC course proposals for FSCT 401 and 409.</p> <p>Please note that the course listed in parenthesis represents the UBC shadow course of the original BCIT course. Students would not register into these UBC shadow courses.</p>

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<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 401 (3) Forensic Biology: DNA Typing Applications</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8160.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>In year four of this joint degree, this course will be the final of three forensic DNA courses that students will complete in this program. This course will provide students with numerous applied learning opportunities by conducting the analysis of a mock forensic DNA case from DNA extraction to the production of DNA profiles. This course will also have students interpret challenging DNA profiles composed of mixed samples, conduct statistical analysis, and effectively communicate these results in a written report, all of which are essential skills of a forensic DNA expert.</p> <p>These three forensic DNA courses (theory, evidence recovery, and applications), the statistics and</p>

	<p>population genetics courses, and the biochemistry specialization will ensure that graduates of this program are well qualified for jobs in the forensic DNA/biology discipline. While students may also choose to work in other areas of forensic science/ investigation or biochemistry, feedback from the needs assessment indicates that graduates of this program will qualify for employment in the biology section of forensic science labs both nationally and internationally.</p> <p>After this program is developed we are planning on applying for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC). One of the curriculum requirements of FEPAC is to provide the students with at least 9 credits in forensic science that has a laboratory component. They further specify that these laboratory components should cover forensic biology, forensic chemistry and microscopy. This course helps to satisfy these requirements.</p> <p>This is a shadow course of BCIT's FSCT 8160. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 409 (3) Law for Forensic Science</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7009.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>In Canada, the criminal justice system is an adversarial process where the Crown Counsel present evidence of a crime and the Defence Counsel represent the accused through the court proceedings (bail hearing, preliminary inquiry, and trial). Recently public awareness of forensic science and crime scene investigation has increased rapidly due to the popular CSI-related TV shows. This has resulted in something commonly referred to as the "CSI effect" where jurors now expect that all criminal cases will have a foundation built upon a multitude of forensic testing results, collected in a short period of time. This course will introduce the students to the requirements of having forensic evidence admitted</p>



as evidence in a trial by both the Crown and Defence, discuss trial strategies, and focus on court issues relevant to the forensic scientists. Students will also develop a comprehensive understanding the qualification process and the role of the expert witness in the court. A course on criminal law is essential to this program as it is a curriculum requirement for accreditation of a forensic science program with the Forensic Science Education Programs Accreditation Commission (FEPAC) and over 92% of the forensic science industry (N= 41) we survey indicated that an understanding of criminal and civil laws would be essential, very useful or somewhat useful to work in their area of expertise.

This is a shadow course of BCIT's FSCT 7009. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.

**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 490 (0) Advanced Forensic Science 2</b></p> <p><b>Block registration for the expert witness testimony, population genetics, and forensic chemistry and toxicology courses taken in the Joint BCIT/UBC Degree in Biochemistry and Forensic Science. Registration is limited to students in the Joint Degree Program.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>FSCT 480 is a "placeholder" course worth 0 credit to indicate that a student in this joint Combined Honours specialization is taking courses at BCIT in the fall term of their fourth year. Specifically, students registered into FSCT 490 would be registered into BCIT's FSCT 7010 (FSCT 410), FSCT 8305 (FSCT 411), and FSCT 8156 (FSCT 412).</p> <p>For more information about BCIT's FSCT 7010, 8305, and 8156, please see the UBC course proposals for FSCT 410, 411, 412.</p> <p>Please note that the course listed in parenthesis represents the UBC shadow course of the original BCIT course. Students would not register into these UBC shadow courses.</p>

**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 410 (2) The Expert Witness – Prepared for Court</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 7010. [2-0-0]</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>A multi-disciplinary report analyzing the state of forensic science in Canada was released in 2012 and provided several recommendations for improvement including the need for further education in report writing, courtroom testimony, and quality assurance. The Law and Forensic Science (FSCT 409) course in this program will provide students with an appreciation of the Canadian criminal justice system and the role that forensic scientists play as expert witnesses. In this expert witness course students will get the opportunity to apply this knowledge in the moot court demonstration portion of this course. Students will familiarize themselves with strategies to effectively communicate technical forensic terms and</p>

	<p>techniques in a clear and concise manner, develop an expert witness curriculum vitae, submit a forensic report, and undergo cross-examination by experienced practicing criminal lawyers.</p> <p>Realistic courtroom testimony experience will be extremely helpful for students to find careers in forensic science as over 92% of the forensic science industry we surveyed (N=41) indicated that expert witness testimony knowledge and skills were essential, very useful, or somewhat useful to work in their area of expertise. Courtroom testimony is also a required curriculum topic for a forensic science education program to be accredited with the Forensic Science Education Programs Accreditation Commission (FEPAC).</p> <p>This is a shadow course of BCIT's FSCT 7010. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 411 (3) Population Genetics</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8305.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>Feedback from the forensic science industry (industry interviews, survey results, and consultation) indicated that forensic science programs should specialize in an area of forensic science rather than provide a program that is too broad. For this reason we have partnered with the UBC Biochemistry and Molecular Biology department and provided a number courses focused on forensic DNA (theory, application, and evidence recovery). While students may find careers in a variety of different forensic investigation fields and forensic science disciplines we feel that many of the graduates will be successful in obtaining a career in the field of forensic DNA. This newly developed BCIT Population Genetics course will cover forensically relevant topics, genetic markers, theory and statistical analysis to ensure that the graduates of this program will have the background to excel in the area of advanced forensic DNA statistics and</p>

	<p>communicate these topics effectively to a court of law. This course will also ensure that students meet the forensic accreditation standards in Canada which require staff working in the forensic DNA section of the laboratory to have statistics and/or population genetics courses. The Fundamentals of Genetics (BIOL 234), Elementary Statistics for Applications (STAT 200), and Molecular Genetics (BIOL 335), combined with this Population Genetics will ensure that the students have a strong foundation in genetics and statistics which will allow them to excel in the field of forensic DNA analysis.</p> <p>This is a shadow course of BCIT's FSCT 8305. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: 2**

<p><b>Faculty:</b> Medicine</p> <p><b>Department:</b> Biochemistry and Molecular Biology</p> <p><b>Effective Date for Change:</b> 17S</p>	<p><b>Date:</b> September 23, 2015</p> <p><b>Contact Person:</b> Warren Williams</p> <p><b>Phone:</b> 604-822-8729</p> <p><b>Email:</b> wwarren@mail.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FSCT 412 (3) Forensic Chemistry and Toxicology</b></p> <p><b>Credit limited to students in the Joint Degree Program in Biochemistry and Forensic Science. Same as BCIT FSCT 8156.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None (New Course)</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale:</b></p> <p>The UBC biochemistry department and the BCIT Forensics Science and Technology department are proposing the creation of a joint B.Sc. (Combined Honours) in Biochemistry and Forensic Science. By combining the strengths of our two departments, we can provide students with an exceptional interdisciplinary educational experience in Biochemistry and Forensic Science as well as job ready skills and abilities to become the future leaders of the forensic science and biochemistry fields.</p> <p>This Forensic Chemistry and Toxicology course will be developed by the BCIT Forensic Science and Technology department and will allow students to expand on the fundamental theory and techniques that the students will learn in their second year UBC Analytical Chemistry (CHEM 211) course and laboratory. Students in this course will gain a wealth of hands-on laboratory skills in this course by conducting numerous laboratory exercises in BCIT's "state-of-the-art" analytical chemistry laboratory (including a triple quad LC-MS-MS and GC-MS instruments).</p>

	<p>Students will also gain knowledge and skills to conduct an analysis in the following areas of forensic investigation: homicide; sexual assault; drug analysis; driving impairment; and death investigation. In addition, this course will involve industry presentations from forensic experts from the RCMP, Health Canada, and private laboratories. These presentations will allow the students to see how these chemistry techniques are being utilized in industry and have an opportunity to network with these presenters.</p> <p>After this program is developed we are planning on applying for accreditation with the Forensic Science Education Programs Accreditation Commission (FEPAC). One of the curriculum requirements of FEPAC is to provide the students with at least 9 credits in forensic science that has a laboratory component. They further specify that these laboratory components should cover forensic biology, forensic chemistry and microscopy. This course helps to satisfy these requirements.</p> <p>This is a shadow course of BCIT's FSCT 8156. This course will not be taught at UBC and students will not register into it. It exists to provide information about the BCIT course in the UBC calendar. The BCIT course syllabus below is provided for supplementary information.</p>
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## 16 Appendices

Appendix 1	Program Map
Appendix 2	Programs Goals Integration
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Appendix 4	Correspondence and Related Documents
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Appendix 11	Course Outlines
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## Appendix 1: Program Map

## Year 1\* - Program Map B.Sc. (Hon.) in Biochemistry and Forensic Science

Program Cluster	Term 1 (UBC)		Term 2 (UBC)		Credit Totals
Natural Science Core	MATH 100 (or 102, 104) Differential Calculus 3 credits	CHEM 121 (or 111) Principles of Chemistry 4 credits (lab)	MATH 101 (or 103, 105) Integral Calculus 3 credits	CHEM 123 (or 113) Principles of Chemistry 2 4 credits (lab)	25
	PHYS 101 Energy and Waves 3 credits (lab)	BIOL 140 Investigations in Life Sciences Lab 2 credits	BIOL 121 Genetics, Evolution, and Ecology 3 credits	PHYS118,119 Elecricity, Light & Radiation 4 credits (lab)	
Biochemistry					
Forensic Science					
Arts/Communication	ENGL 112 Strategies for University Writing 3 credits	Elective 2 credits	ENGL Elective≠ 3 credits	9	
Total Credits			0 BCIT 34 UBC		
17			17		
			Total 34		

White blocks indicate UBC courses and grey blocks indicate BCIT courses.

\* Year 1 - these first year Science courses are prerequisites to enter the program which starts in Year 2.

†SCIE 113 First-year Seminar in Science (3 credits) can be used for this English elective

## Year 2 - Program Map B.Sc. (Hon.) in Biochemistry and Forensic Science

Program Cluster	Term 3 (UBC/BCIT)		Term 4 (UBC/BCIT)		Credit Totals
Natural Science Core	CHEM 203 Introduction to Organic Chemistry 4 credits (lab)		CHEM 213+245 Organic Chemistry 3+1 credits (lab)		8
Biochemistry	BIOL 200 Fundamentals of Cell Biology 3 credits	STAT 200 Elementary Statistics for Applications 3 credits	CHEM 211 Analytical Chemistry 4 credits (lab)	BIOC 203 Fundamentals of Biochemistry 3 credits	16
	BIOL 234 Fundamentals of Genetics 3 credits				
Forensic Science	FSCT 7320 Intro to Forensic Science 3 credits				3
Arts/ Communication			COMM 7200 Report Writing and Communication for Forensic Inv. 3 credits	LIBS 7002 Applied Ethics 3 credits (online available)	6
Total Credits	16		17		9 BCIT 24 UBC
			Total 33		

## Year 3 - Program Map B.Sc. (Hon.) in Biochemistry and Forensic Science

Program Cluster	Term 5 (BCIT/UBC)		Term 6 (BCIT/UBC)		Credit Totals
Natural Science Core					
Biochemistry			<div>BIOC 301 Biochemistry Lab 3 credits (lab)</div> <div>BIOC 303 Molecular Biochemistry 6 credits</div>	<div>BIOL 335 Molecular Genetics 3 credits</div>	12
Forensic Science	<div>FSCT 8150 Forensic Biology: DNA Typing Theory 3 credits (online)</div> <div>FSCT 8371 Business Management for Forensic Science 3 credits</div>	<div>FSCT 8370 Quality Assurance for Forensic Science 3 credits</div>	<div>FSCT 8155 Forensic Biology: Evidence Recovery 3 credits (lab)</div> <div>FSCT Elective 3 credits</div>	<div>FSCT 7910 Research Methodology &amp; Measurement Models 3 credits</div>	18
Arts/Communication	<div>Arts Elective 3 credits</div>				3
Total Credits	16.5		16.5		18 BCIT 15 UBC
			Total		33

## Year 4 - Program Map B.Sc. (Hon.) in Biochemistry and Forensic Science

Program Cluster	Term 7 (UBC/BCIT)	Term 8 (UBC/BCIT)	Credit Totals
Natural Science Core			
Biochemistry	<div>BIOC 402 Proteins Structure and Function 3 credits</div> <div>BIOC 410 Nucleic Acids Structure and Function 3 credits</div>	<div>BIOC 449 (Honours Thesis) <b>OR</b> BIOC 420 (Advanced Biochemical Tech.) <b>AND</b> *Advanced BIOC Elective 6 credits</div> <div>* Advanced BIOC elective  3 credits</div>	15
Forensic Science	<div>FSCT 8160 Forensic Biology: DNA Typing Applications 3 credits (lab)</div> <div>FSCT 7009 Law for Forensic Science 3 credits</div>	<div>FSCT 7010 The Expert Witness: Prepared for Court 2 credits</div> <div>FSCT 8305 Population Genetics 3 credits</div> <div>FSCT 8156 Forensic Chemistry and Toxicology 3 credits (lab)</div>	14
Arts/ Communication		<div>Arts Elective 3 credits</div>	3
Total Credits	15	17	14 BCIT 18 UBC
		Total	32

\*Advanced BIOC Electives include: BIOC 403, BIOC 440, BIOC 450, and BIOC 460

**BCIT - Year 3 Term 6 Elective Options**

- FSCT 8230 Medicolegal Aspects of Alcohol (3 credits)
- FSCT 7310 Crime Scene Investigation (3 credits)
- FSCT 8320 The Science of Fingerprints - Theory (3 credits)
- FSCT 8240 Forensic Toxicology 1 (3 credits) (online)

**UBC- Year 4 Term 8 Advanced BIOC Elective Options**

- BIOC 403 Enzymology (*MWF 9-10*)
- BIOC 440 Concepts in Molecular Biology (*MWF 2-3*)
- BIOC 450 Membrane Biochemistry (*MWF 10-11*)
- BIOC 460 Advanced Techniques in Biochemistry (*Tues & Thurs 9:30-11*)

## Appendix 2: Program Goals Integration

BCIT	Required Courses													Electives			
	FSCT 7320	COMM 7200	LIBS 7002	FSCT 8150	FSCT 8370	FSCT 8371	FSCT 8155	FSCT 7910	FSCT 8160	FSCT 7009	FSCT 8156	FSCT 8305	FSCT 7010	FSCT 8230	FSCT 7310	FSCT 8320	FSCT 8240
Demonstrate a comprehensive understanding of biochemistry, molecular biology, chemistry, and forensic science, including the main principles, techniques, and latest developments.	x			x		x	x	x	x	x	x	x	x	x	x	x	x
Perform with confidence a variety of laboratory procedures relevant to biochemistry, molecular biology, chemistry, and forensic science including the ability to operate analytical instruments.					x		x		x		x	x		x	x		
Apply and maintain quality assurance processes and safety standards in a scientific laboratory.				x	x	x	x		x		x				x		x
Design and conduct academic research independently and in a team environment.				x		x		x	x		x						
Communicate complex scientific information and evidence in oral and written formats for academic or legal purposes.	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x
Apply critical-thinking, analytical, and problem solving skills to the disciplines of biochemistry, molecular biology, chemistry, and forensic science.			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Demonstrate the communication and interpersonal skills needed to work effectively in a team environment.	x	x	x		x	x	x	x	x	x	x	x	x	x	x		
Develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science.	x	x	x			x	x	x	x		x	x					
Exemplify the highest ethical standards and professional principles.	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x

UBC	Required Courses													Electives					
	CHEM 203	BIOL 200	BIOL 234	STAT 200	CHEM 213	CHEM 245	BIOC 203	CHEM 211	BIOC 301	BIOC 303	BIOL 335	BIOC 402	BIOC 410	BIOC 449	BIOC 420	BIOC 403	BIOC 440	BIOC 450	BIOC 460
Demonstrate a comprehensive understanding of biochemistry, molecular biology, chemistry, and forensic science, including the main principles, techniques, and latest developments.	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Perform with confidence a variety of laboratory procedures relevant to biochemistry, molecular biology, chemistry, and forensic science including the ability to operate analytical instruments.	x		x			x		x	x					x	x				
Apply and maintain quality assurance processes and safety standards in a scientific laboratory.	x					x		x	x					x	x				
Design and conduct academic research independently and in a team environment.				x					x				x	x	x				
Communicate complex scientific information and evidence in oral and written formats for academic or legal purposes.	x	x				x	x	x	x	x			x	x	x		x	x	x
Apply critical-thinking, analytical, and problem solving skills to the disciplines of biochemistry, molecular biology, chemistry, and forensic science.	x	x		x		x	x	x	x				x	x	x	x	x	x	x
Demonstrate the communication and interpersonal skills needed to work effectively in a team environment.	x					x	x	x	x				x	x	x		x	x	x
Develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science.		x		x			x		x	x	x	x	x	x	x		x	x	x
Exemplify the highest ethical standards and professional principles.	x								x				x	x	x		x	x	x



## Appendix 6: Employability Skills Matrix

BCIT Courses	Written & oral communication	Team work/ Interpersonal skills	Professional & ethical behaviour	Quality assurance	Technical competence	Critical thinking & problem solving	Management/ Leadership	Research or validation skills	Criminal/civil laws process	Expert witness testimony	Investigative techniques
FSCT 7320	X	X	X			X					X
COMM 7200	X	X	X			X	X				
LIBS 7002	X	X	X			X	X				
FSCT 8150	X			X		X		X	X		X
FSCT 8370	X	X	X	X	X	X	X				X
FSCT 8371	X	X	X	X	X	X	X	X			X
FSCT 8155	X	X	X	X	X	X			X		X
FSCT 7910	X	X	X					X			
FSCT 8160	X	X		X	X			X			X
FSCT 7009	X	X	X			X			X		X
FSCT 7010	X	X	X			X			X	X	
FSCT 8156	X	X	X	X	X	X		X			X
FSCT 8305	X	X	X	X	X	X					X
<b>Elective Courses</b>											
FSCT 8230	X	X	X		X	X			X	X	X
FSCT 7310	X	X	X		X	X	X				X
FSCT 8320	X		X		X	X					X
FSCT 8240	X		X	X	X	X			X		X

UBC Courses	Written & oral communication	Team work/ Interpersonal skills	Professional & ethical behaviour	Quality assurance	Technical competence	Critical thinking & problem solving	Management/ Leadership	Research or validation skills
CHEM 203	X	X	X	X	X	X		
BIOL 200	X					X		
BIOL 234		X			X	X		
STAT 200					X	X		X
CHEM 213						X		
CHEM 245	X	X		X	X	X		
CHEM 211	X	X		X	X	X		
BIOC 203	X	X	X			X		X
BIOC 301	X	X	X	X	X	X		X
BIOC 303		X				X		
BIOL 335						X		
BIOC 402						X		X
BIOC 410	X		X			X		X
<b>Elective Courses</b>								
BIOC 449	X	X	X	X	X	X		X
BIOC 420	X	X	X	X	X	X		X
BIOC 403	X					X		X
BIOC 440	X	X	X			X		X
BIOC 450	X	X	X			X		X
BIOC 460	X	X	X			X		X

## **Attachment 1: Industry Survey Results**

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### **Survey Results & Analysis**

for

### **Joint B.Sc. (Combined Honours) in Forensic Science and Biochemistry Industry Survey**

Thursday, February 06, 2014

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## Executive Summary

This report contains a detailed statistical analysis of the results to the survey titled *Joint B.Sc. (Honours) in Forensic Science and Biochemistry Industry Survey*. The results analysis includes answers from all respondents who took the survey in the 16 day period from Tuesday, January 14, 2014 to Wednesday, January 29, 2014. 62 completed responses were received to the survey during this time.

## Survey Results & Analysis

**Survey:** Joint B.Sc. (Honours) in Forensic Science and Biochemistry Industry Survey

**Author:**

**Filter:**

**Responses Received:** 62

### 1) Do you work in a forensic related area?

Response	Count	Percent
Yes	41	66.1%
No	21	33.9%

### 2) I am working in (select all that apply):

Response	Count	Percent
Government agency	24	38.7%
Private industry/laboratory	22	35.5%
Law enforcement (civilian or sworn member)	6	9.7%
Academic Researcher/Faculty/Instructor	8	12.9%
Biotechnology	1	1.6%
Consulting	9	14.5%
Medical profession	4	6.5%
Legal profession	3	4.8%
Investigator	8	12.9%
Recruiter/HR	3	4.8%
Other (please specify)	2	3.2%

#### Other Responses:

Office of the Chief Medical Examiner
Environmental chemistry
Assessor Quality ISO
Previous RCMP forensics

**3) If you work in an area of Forensic Science, what aspect(s) are you involved in?  
(select all that apply.)**

<b>Response</b>	<b>Count</b>	<b>Percent</b>
Evidence recovery	10	16.1%
Forensic identification	9	14.5%
Fingerprinting	5	8.1%
Forensic DNA/biology	11	17.7%
Forensic chemistry	6	9.7%
Forensic toxicology	7	11.3%
Drug analysis	5	8.1%
Forensic anthropology/archaeology	5	8.1%
Firearms	2	3.2%
Documents	2	3.2%
Quality assurance	13	21.0%
Legal/lawyer	3	4.8%
Coroner	5	8.1%
Investigator	8	12.9%
Consultant	11	17.7%
Not in the area of forensic science	5	8.1%
Other (please specify)	9	14.5%

Other Responses:

Medical Examiner Office
Forensic Nurse Examiner
Administrator for the field selected above - And main area is forensic pathology
Food regulatory testing
Wildlife Forensics
Psychology
Pathologist
BCIT Instructor
bloodstain pattern analysis
Forensic Pathology
food testing

emergency management
----------------------

**4) What is your current job title?**

<b>What is your current job title?</b>
Research Scientist
quality assurance manager
Laboratory supervisor, analytical services
Deputy Director - Scientific Services
Criminal lawyer in private practice (trial lawyer)
Coroner
Forensic Biologist / Quality Manager
Team Lead Death Investigation
Forensic Nurse Specialist
Chief Medical Examiner
Quality Assurance Coordinator
Laboratory Manager
Supervisor of Operations
Assistant Director Laboratory Services Branch Ontario Ministry of the Environment
QUALITY MANAGER
Technical Leader and Department Head
Lab Director
Director of Lab Services, Ontario
Lab assistant
Wildlife Forensic Research Technician
Lab. Manager
Chemistry Analyst
Psychologist
Director
Fire and explosion investigation.
Officer in Charge, Forensic Identification Services "E" Division
Sergeant
Forensic DNA Analyst and Quality Assurance Manager
Consultant in Forensic Pathology

partner
Part-time Forensic Consultant
Instructor, BCIT, Forensic Evidence
Lab manager
Owner, Canadian Forensic Consulting
Investigator ICBC/SUI
Forensic Examiner
Retired RCMP with consulting co.
Forensic Alcohol Specialist
Laboratory Supervisor
S.I.U. Officer, I.C.B.C.
Toxicology Instructor Toxicology Consultant Retired forensic toxicologist
Forensic Technologist
Forensic Pathologist
Director and Technical Leader
Manager, Microbial Contaminants
VP Quality
Manager, Research & Analysis
Operations Manager
Forensic DNA Analyst
Lab Manager
CEO
Deputy Chief Coroner
Manager
Manager, health and safety/ emergency management
Environment Manager
Manager Analytical Services
Consultant
Part time Faculty BCIT forensics Consultant forensic chemist
Quality Manager
Quality Assurance Manager

### 5) What country/area do you work in?



Response	Count	Percent
British Columbia, Canada	35	56.5%
Other provinces in Canada	28	45.2%
United States	3	4.8%
Other (please specify)	1	1.6%

Other Responses:

Saskatchewan
Throughout Canada with some international work.
Alberta

**6) How many years have you worked at your current job?**

Response	Count	Percent
0 to 2 years	2	3.2%
3 to 5 years	12	19.4%
6 to 10 years	13	21.0%
11 to 15 years	11	17.7%
More than 15 years	24	38.7%

**7) Does your job description include hiring?**

Response	Count	Percent
Yes	42	68.9%
No	19	31.1%

**8) How would you rate the following knowledge and skills as necessary to work in your area of expertise?**

	<b>Essential</b>	<b>Very useful</b>	<b>Somewhat useful</b>	<b>Not very useful</b>	<b>Not at all useful</b>	<b>No opinion</b>
Ethics and professionalism	91.9% (57)	8.1% (5)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Criminal/civil laws process	23.0% (14)	26.2% (16)	26.2% (16)	14.8% (9)	8.2% (5)	1.6% (1)
Giving expert witness testimony	30.6% (19)	30.6% (19)	9.7% (6)	17.7% (11)	11.3% (7)	0.0% (0)
Technical laboratory skills	53.2% (33)	16.1% (10)	11.3% (7)	12.9% (8)	6.5% (4)	0.0% (0)
General investigative techniques	29.5% (18)	29.5% (18)	27.9% (17)	11.5% (7)	1.6% (1)	0.0% (0)
Communication skills (verbal and written reports)	74.2% (46)	24.2% (15)	1.6% (1)	0.0% (0)	0.0% (0)	0.0% (0)
Interpersonal skills	54.8% (34)	40.3% (25)	4.8% (3)	0.0% (0)	0.0% (0)	0.0% (0)
Ability to work in teams	45.2% (28)	40.3% (25)	11.3% (7)	3.2% (2)	0.0% (0)	0.0% (0)
Analyze and think critically	71.0% (44)	27.4% (17)	1.6% (1)	0.0% (0)	0.0% (0)	0.0% (0)
Ability to plan and organize	58.1% (36)	40.3% (25)	1.6% (1)	0.0% (0)	0.0% (0)	0.0% (0)
Problem solving skills	63.3% (38)	35.0% (21)	1.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)
Understanding of laboratory quality assurance processes	45.2% (28)	27.4% (17)	16.1% (10)	8.1% (5)	3.2% (2)	0.0% (0)
Ability to conduct research or validation studies	22.6% (14)	38.7% (24)	21.0% (13)	12.9% (8)	3.2% (2)	1.6% (1)

**9) Are there any additional knowledge or skills not listed in Question 8 that would be beneficial to gain employment in your agency/organization?**

**Are there any additional knowledge or skills not listed in Question 8 that would be beneficial to gain employment in your agency/organization?**

being able to work on your own.
Medical skills and experience
There are generally both technical and reporting jobs within the forensic biology/DNA discipline. Technical hands-on work requires some of the skills noted above to be essential while the reporting component requires other skills to be essential (answers to question 8 pertain more to the reporting role). These complement one another.
WORK HAZARD AND SAFETY KNOWLEDGE
Customer/client service
Ability to be tenacious and detail focused - ESSENTIAL
None
NO....very little work for private forensic consulting
Quality Assurance File Review and management
None
Good computer skills
Minimum qualifications are published in SWGDAM guidelines and SCC ISO17025 program for forensics from time to time
At the junior level good technical, problem solving, QA, and organizational skills are essential. As one becomes more senior the ability to communicate and explain results, give testimony, and aid in regulatory compliance become more important and useful. Understanding and complying with ethical standards is critical at all stages of employment.
Medical knowledge and/or experience
Basics of Industrial Environmental treatment systems

**10) Below are the proposed program goals of the potential UBC/BCIT joint degree (B.Sc. Honours) in Forensic Science and Biochemistry. How necessary would you rate the following knowledge and skills for one of our graduates to have in order to work in your area of expertise.**

	Essential	Very useful	Somewhat useful	Not very useful	Not at all useful	No opinion
Develop a comprehensive understanding of biochemistry, molecular biology, and forensic science, including the main principles, techniques, and latest developments.	25.4% (15)	20.3% (12)	27.1% (16)	10.2% (6)	10.2% (6)	6.8% (4)
Perform with confidence a variety of laboratory procedures relevant	22.4% (13)	32.8% (19)	17.2% (10)	10.3% (6)	12.1% (7)	5.2% (3)

to biochemistry, molecular biology and forensic science including the ability to operate analytical instruments.						
Apply and maintain quality assurance processes and safety standards in a scientific laboratory.	42.4% (25)	28.8% (17)	13.6% (8)	5.1% (3)	1.7% (1)	8.5% (5)
Design and conduct academic research individually and in a team environment.	5.2% (3)	43.1% (25)	25.9% (15)	19.0% (11)	5.2% (3)	1.7% (1)
Communicate complex scientific information and evidence in oral and written formats for academic or legal purposes.	31.0% (18)	31.0% (18)	19.0% (11)	10.3% (6)	5.2% (3)	3.4% (2)
Apply critical-thinking, analytical, and problem solving skills to the disciplines of biochemistry, molecular biology, and forensic science.	32.8% (19)	36.2% (21)	13.8% (8)	6.9% (4)	6.9% (4)	3.4% (2)
Demonstrate the communication and interpersonal skills needed to work effectively in a team environment.	41.4% (24)	39.7% (23)	15.5% (9)	0.0% (0)	0.0% (0)	3.4% (2)
Develop lifelong learning skills to keep up-to-date with changing technologies and remain at the forefront of science.	33.9% (20)	44.1% (26)	15.3% (9)	1.7% (1)	1.7% (1)	3.4% (2)
Exemplify the highest ethical standards and professional principles.	71.2% (42)	16.9% (10)	8.5% (5)	0.0% (0)	0.0% (0)	3.4% (2)

**11) Do you have any additional comments about the above listed proposed program goals?**

<b>Do you have any additional comments about the above listed proposed program goals?</b>
The first two questions under 10 above are somewhat vague. You need these skills related to forensic science, but not specifically DNA. If the two are separate, the answers would be different.
I am imagining someone with this type of education either working in a laboratory environment, or as a consultant to counsel involved in litigation, or as an investigator guiding or involved in crime scene/event scene gathering of relevant information.

It's unlikely that any B.Sc. program would convey the degree of technical hands-on laboratory proficiency required to operate in a forensic setting, thus many of the technical skills are significantly honed through in-house training programs. The foundation and the competencies (including behavioural) are critical.
I don't think a B.Sc. in Forensic is very useful to start with. I would never hire someone with such a degree (even with Honours as described). I think you need a B.Sc. first in your main field (Biochemistry) and then develop forensic afterwards at the MSc level. We would not hire your students.
ISO STANDARDS, KNOWLEDGE OF THE INDUSTRY AND GOVERNMENT POLICIES AND LAW
No
No
where are the students to find work ? 99% of crime scene work is done by police
I could answer Essential in all of the above but I first think you should have an overall view of exactly what forensic services are now in practice and in what field they are required. I can only comment on what is happening in the RCMP and police forces where most of your field forensic members are employed. I am not sure what the stats are now but there were only around 400 forensic members employed in the RCMP within Canada. Police forensic sections only employ police personnel which never obtain any formal Honours or graduate degrees. Forensic training is supplied by the RCMP. There is a 5 year understudy program and upon completion they receive a certified forensic member status. The names of these members are forwarded to the Solicitor General of Canada who then deems them to be fingerprint experts to tender evidence in court. The core of forensic study within the police service is covered in question 3 and 8 with the exception of RCMP Crime Laboratory service who are civilian members who conduct specific laboratory analysis. Forensic crime scene examiners perform many of the items in #3 but only do evidence collection for the Crime Lab.
To enter the field of forensic toxicology, a courses in pharmacology, human physiology and analytical chemistry are essential.
none
These goals do not include preparing a graduate to be a forensic toxicologist, which I assume was not your purpose. If you wanted to expand to include that subset, you could also collaborate with UBC's Faculty of Pharmaceutical Sciences to provide courses in drugs and drug effects on the body (a biochemistry related subject). This would maybe expand the number of students willing to enter the program in the first place, always a challenge for any new program.
A B.Sc. Honours degree will not be sufficient training to practice forensic pathology--a medical degree with postgraduate pathology and forensic pathology training is required.
We do not do forensic related work.
This program would be useful for someone at the more senior level who may be required to testify regarding results or who may be required to manage the analysis of legal samples.
no comment

**12) If this proposed degree was developed, how often would your organization hire a B.Sc. (Honours) graduate (with the above listed knowledge and skills) from a joint UBC-BCIT in Forensic Science and Biochemistry?**

Response	Count	Percent
Always or almost always	4	6.5%
Often	4	6.5%
Sometimes	24	38.7%
Seldom	12	19.4%
Never	7	11.3%
No opinion	11	17.7%

**13) Would your organization be more likely to hire graduates from an accredited program (for example: FEPAC - Forensic Science Education Programs Accreditation Commission) versus a non-accredited program?**

Response	Count	Percent
Yes	26	41.9%
No	14	22.6%
No opinion	22	35.5%

**14) In the next five years, employment in forensic science or related areas in Canada will?**

Response	Count	Percent
Significantly increase	2	3.2%
Increase	13	21.0%
Remain steady	28	45.2%
Decrease	1	1.6%
Significantly decrease	0	0.0%
No opinion	18	29.0%

**15) In the next five years, employment in science related areas in Canada will?**

Response	Count	Percent
Significantly increase	3	4.9%
Increase	21	34.4%
Remain steady	22	36.1%
Decrease	6	9.8%
Significantly decrease	0	0.0%
No opinion	9	14.8%

**16) Excluding any work experience or internal training required, which level of education is preferable to work in your area/specialization?**

Response	Count	Percent
High School	0	0.0%
Certificate	1	1.7%
Diploma	2	3.3%
Any Degree	8	13.3%
Bachelor of Science Degree	29	48.3%
Bachelor of Science Degree with Honours	10	16.7%
Masters	9	15.0%
Phd	1	1.7%

**17) As there are currently no Forensic Science (Bachelor of Science) degrees in Western Canada, a degree in Forensic Science and Biochemistry offered jointly by BCIT and UBC will help fill that void?**

Response	Count	Percent
Strongly agree	11	17.7%
Agree	29	46.8%
Neutral	12	19.4%
Disagree	0	0.0%
Strongly Disagree	3	4.8%
No opinion	7	11.3%

**18) Please feel free to provide any additional general comments about this proposed program.**

<b>Please feel free to provide any additional general comments about this proposed program.</b>
The name of the program says Forensic Science, but do you mean only DNA? Will this program cater to Toxicology or Trace Evidence? I think saying Forensic Science is misleading.
I would like to know when the course starts and also when students will be available for COOP terms as this would be extremely beneficial for both my department and the students.
I've worked in this role for almost 5 years but have been in the field for 20, most of it in management with extensive experience in recruitment. The program would indeed fill a void for forensic science degrees in Western Canada and would no doubt be a popular draw but forensic job opportunities across Canada remain relatively rare and don't tend to focus exclusively on local candidates when they do arise. Having said that, the US job market is significantly larger (not just because the population is larger but because forensic science is organized differently such that there are numerous laboratories - incl. federal, state, county, municipal, etc - in any given state). Another general comment is that, in my experience, the individual competencies of any particular candidate far outweigh any association with a particular program. Most forensic biology/DNA experts across the country have pure science degrees, including at the graduate level, and undergraduate forensic programs don't tend to offer any meaningful advantages over these people per se.
this degree would precede a nursing degree and be helpful for nurses wanting to enter forensic nursing specialty
This is the type of program where students will not find jobs afterwards. The students from the East already have issues. I receive very regularly letters of people that can't find work in the field. Alberta will not be hiring your students.
NO COMMENT
I think there are sufficient educational opportunities that currently exist in Canada and worldwide to fill any possible Canadian demand for people with this training. Canada's job market is currently saturated with people with the necessary education to fill these roles. In fact, most forensic practitioners educated in Canada move to the United States to fill positions there simply because there is demand there and none here. Many US labs have Canadians as senior analysts and technical leaders as a Canadian education in Biochemistry and Molecular Biology is regarded highly in the US. I really question the need for such a program in Canada and can't help but wonder if it will further contribute to the oversupply of qualified people looking for jobs here. Canada is a small place relative to the US and our culture is different so the demand for people is different (it is just a smaller market). If you want to train people only to have them leave the country to find a job in the US, then this program is worthwhile to develop. However, I think you really have to consider these issues before you begin planning the details.
I would find a masters program very beneficial
if the students want to work crime scenes they better plan for a career in policing. even then the chance of getting into forensics is very low
You must pick your target area or field of expertise that you wish to concentrate on. Do your homework.



This program seems tailored to DNA specialist. Other specializations (Toxicology, Trace evidence, firearms) require different education or at the least, courses in pharmacology/toxicology, human physiology and analytical chemistry.

The jobs for forensic biologists, forensic toxicologists and forensic chemists across Canada are not numerous, but are secure and will grow slowly over time. If a new employee has a "Forensic Science" degree, that will significantly shorten the in-service training time for the employer which is a huge benefit and will cause the employer to seek these types of graduates. One would think there should be at least 1 institution in Western Canada that would be able to offer this type of program so students don't have to travel to the East.

As noted above, my area of specialization (forensic pathology) requires different training. A graduate of this proposed program will not be qualified to practice forensic pathology, unless they also have MD and postgrad pathology training. My survey responses reflect this. (For example, I can't answer question #16.) I can't comment on the usefulness of this program in other areas of forensic science.

Overall less and less jobs are available in forensic biology in Canada so train students in molecular biology, genetics, and population statistics with emphasis on forensic science so that if they do not find job in forensic biology, they can work in non-forensic labs.

Job descriptions and qualifications of positions within government and other organizations would have to be changed in order to identify the need for a person having a degree in Forensic Science and Biochemistry. This could have implications for job levels and salaries within the organization which may create some challenges to hire folks with this level of skill and expertise.

**19) If you are interested in collaborating with BCIT and UBC on this proposed program, or if you are interested in participating in a focus group related to the proposed program, please enter your contact information below. (Your contact information will be kept separate from your survey responses.) Name, Organization, Email, Telephone number:**

**20) If you would like to enter the draw for a \$100 gift certificate from Indigo Canada, please enter your email address below. (Your contact information will be kept separate from your survey responses.)**

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## Attachment 2: Potential Student Survey Results

### Initial UBC Biochemistry Student Survey Results with General Comments (71 respondents)

1. To begin, would you have been interested in entering this program after first year university?

Extremely interested 33.3% 23

Interested 36.2% 25

Somewhat interested 23.2% 16

Not interested 4.3% 3

No opinion 2.9% 2

2. How would you describe your interest in the field of forensics?

Very interested 25.4% 18

Interested 43.7% 31

Somewhat interested 26.8% 19

Not interested 1.4% 1

No opinion 2.8% 2

3. What level of education would you eventually like to achieve?

Bachelor of Science Degree 19.7% 14

Bachelor of Science Degree with Honours 9.9% 7

Masters Degree 39.4% 28

Phd 31.0% 22

4. Ultimately, what type of profession/organization/agency would you like to work for in the future?  
(select all that apply)

Government Laboratory 63.8% 44

Private Laboratory 58.0% 40

Law Enforcement (civilian or sworn member) 30.4% 21

Biochemistry Researcher 6.4% 32

Teacher/Instructor 23.2% 16

Legal 15.9% 11

Medical 71.0% 49

Coroner Service/Medical Examiner 39.1% 27

Not sure yet 17.4% 12

Other (please specify): Dentist, Veterinarian, Health sector, Business- not related to biochem

5. Assuming you are interested in Forensics, what area of Forensic Science most interests you? (select all that apply)

Crimes Scene Investigation 55.7% 39

Fingerprinting 37.1% 26

Forensic DNA 71.4%50  
Forensic Chemistry 64.3%45  
Forensic Toxicology 75.7%53  
Drug Analysis 70.0%49  
Forensic Anthropology/Archaeology 27.1%19  
Firearms 25.7%18  
Documents 2.9%2  
Quality Assurance 12.9%9  
Not sure yet 5.7%4  
None 1.4%1  
Other (please specify) 0.0%0

**Comments:**

can second year current undergrads join the program too? Please introduce it in such a way that current undergrad biochem students in second year can join too and don't lose a year

If this degree is ever going to exist. Please make it so that current biochem students (>3rd year) can easily transfer into

Why doesn't this already exist!!!

I am very upset that this is going to be offered in the future and was not a choice when I entered the program. I wish I was a bit younger so it would be available to me.

THIS IS AWESOME

Is it a undergrad degree? How is it different from a PhD?

Hope the 3rd year biochem students will be able to see the program rolling and possibly join it before graduation!

WHY DID YOU ONLY THINK OF THIS NOW?!?!?!?! D:

My interests are more focused towards structural biochemistry, particularly involving problem solving. There is some overlap of that into forensics, to my knowledge, but not enough for me to enroll. I have however heard interest from a number of friends in a forensic roll. It may attract more biochemistry students overall

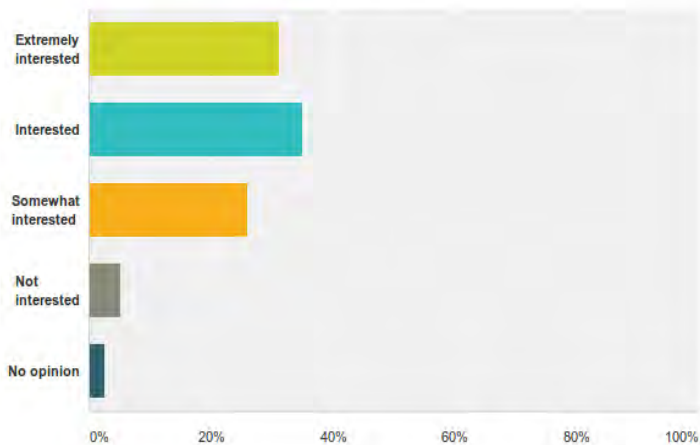
I think it would have been nicer if I could have learned more about biochemistry in my first year (before choosing my major) I had vague ideas on what biochemistry was but not quite sure. Fortunately, I was right about it, but I know some people who switched out of biochemistry after second year because it wasn't what they thought it was.

I think this is a fantastic idea

**Final UBC Biochemistry Student Survey Results (79 respondents)**

**To begin, would you have been interested  
in entering this program after first year  
university?**

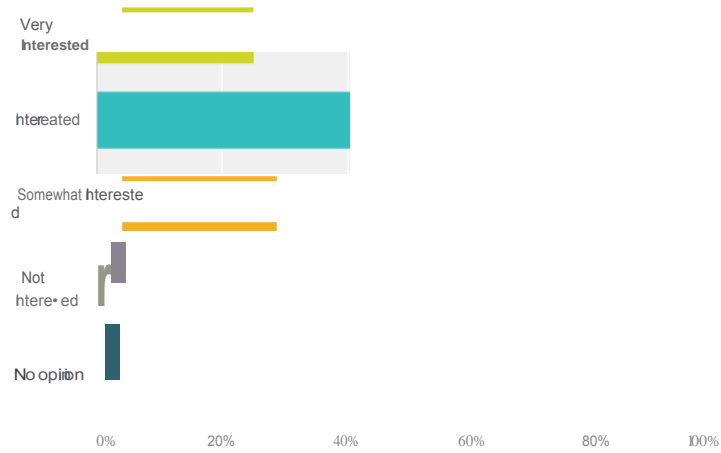
Answered: 77 Skipped: 2



Answer Choices	Responses	
Extremely interested	31.17%	24
Interested	35.06%	27
Somewhat interested	25.97%	20
Not interested	5.19%	4
No opinion	2.60%	2
Total		77

### How would you describe your interest in the field of forensics?

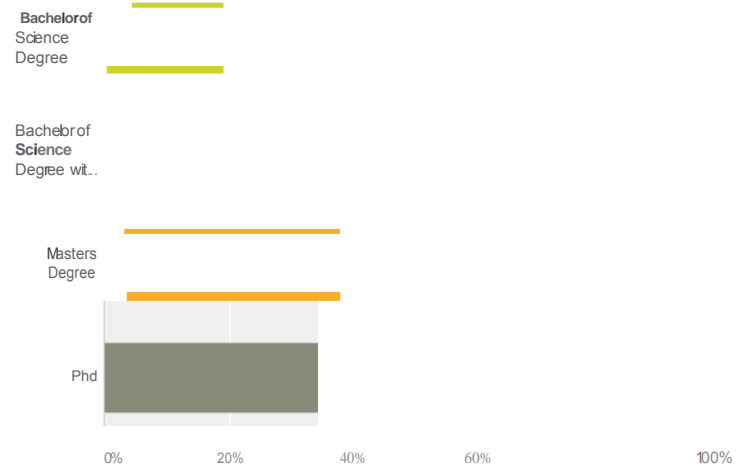
Answered: 79 Skipped: 0



Answer Choices	Responses	
Very Interested	25.32%	20
Interested	41.15%	32
Somewhat Interested	29.11%	23
Not interested	2.13%	
No opinion	2.53%	
Total		79

## What level of education would you eventually like to achieve?

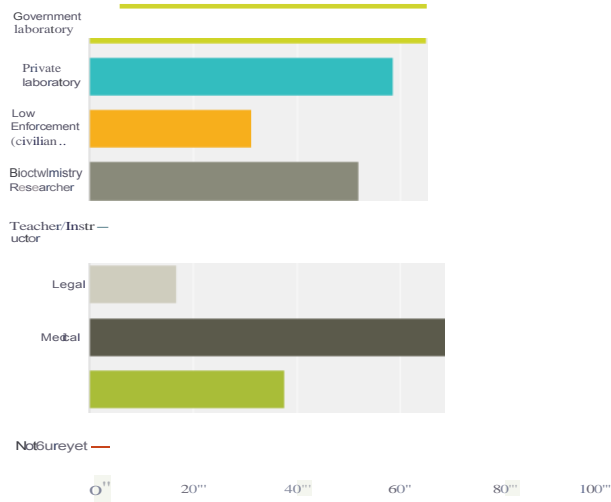
Answered: 79 Skipped: 0



Answer Choices	Responses	
Bachelor of Science Degree	18.99%	15
Bachelor of Science Degree with Honours	8.86%	7
Masters Degree	37.97%	30
Phd	34.18%	27
Total		79

Ultimately, what type of profession/organization/agency would you like to work for in the future? (select all that apply)

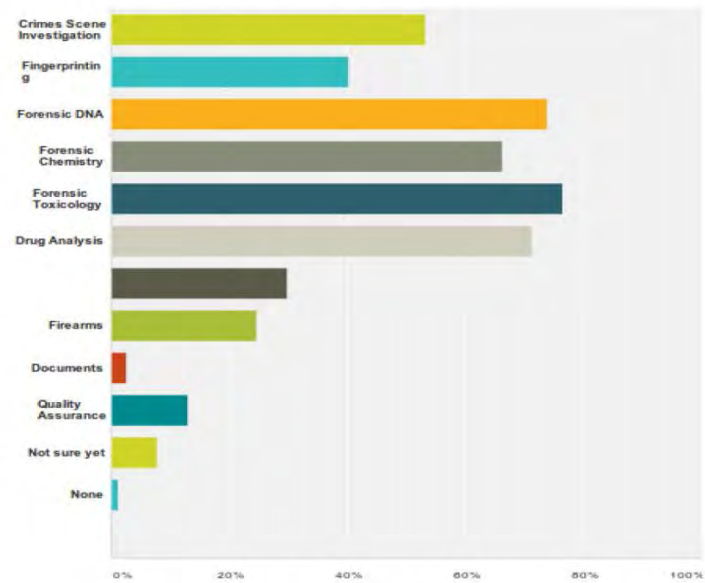
Answered: 77 Skipped: 2



Answer Choices	Responses	
Government Laboratory	64.44%	50
Private Laboratory	58.44%	45
Law Enforcement (civilian or sworn member)	31.17%	24
Biochemistry Researcher	59.59%	40
Teacher/Instructor	24.18%	19
Legal	16.88%	13
Medical	68.33%	53
Coroner Service/Medical Examiner	37.11%	29
Not sure yet	18.18%	14
Total Respondents: 77		

**Assuming you are interested in Forensics,  
what area of Forensic Science most interests  
you? (select all that apply)**

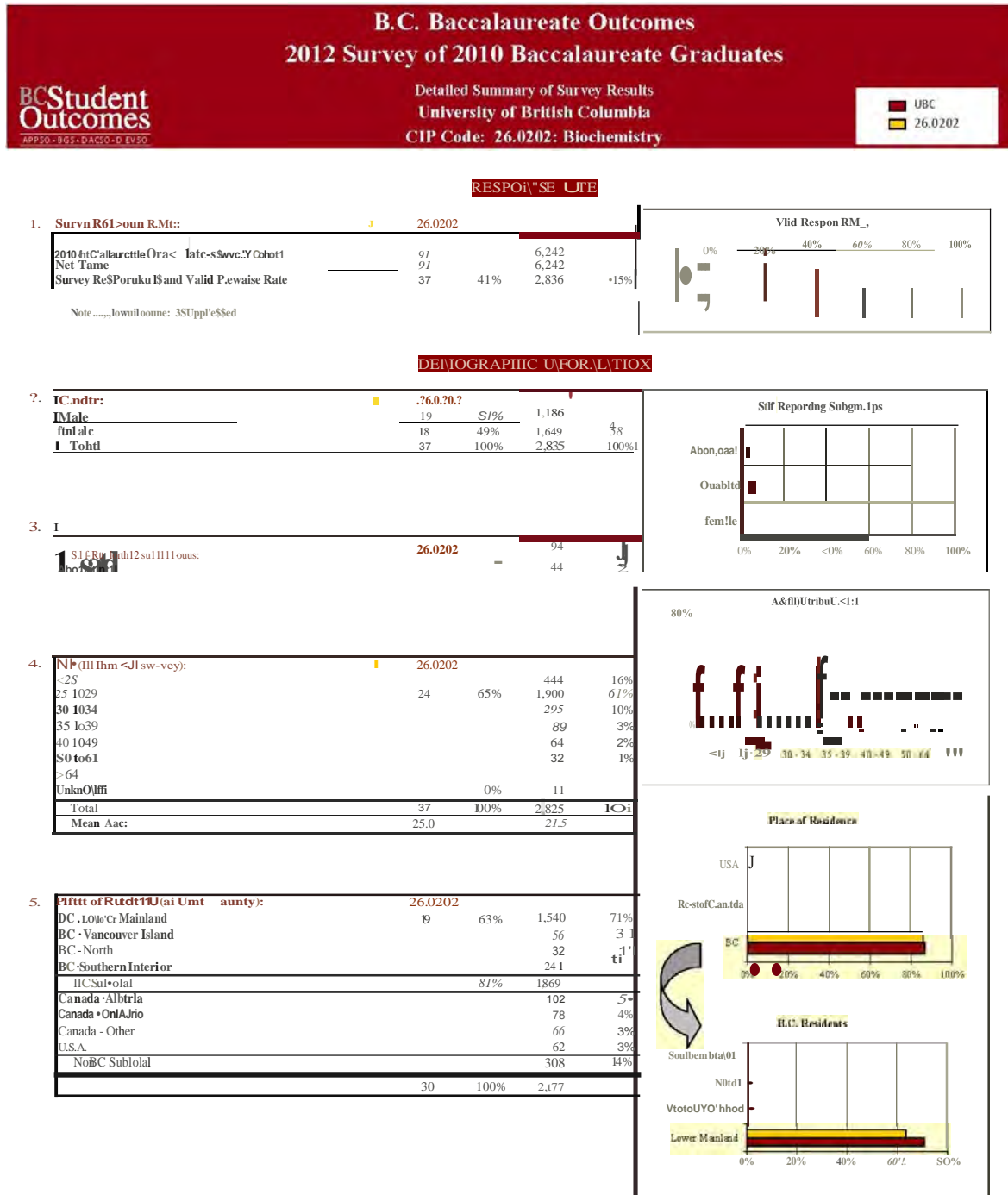
Answered: 77 Skipped: 2



Answer Choices	Responses	
Crimes Scene Investigation	53.25%	41
Fingerprinting	40.26%	31
Forensic DNA	74.03%	57
Forensic Chemistry	66.23%	51
Forensic Toxicology	76.62%	59
Drug Analysis	71.43%	55
Forensic Anthropology/Archaeology	29.87%	23
Firearms	24.68%	19
Documents	2.60%	2
Quality Assurance	12.99%	10
Not sure yet	7.79%	6
None	1.30%	1
Other (please specify)	0%	0
Total Respondents: 77		



## **Attachment 3: UBC Biochemistry B.C. Baccalaureate Outcomes 2012 Survey**



## Outcomes

Overall Summary of Survey Results  
 (Faculty) of British Columbia  
 CIP Code: 26.0202: Biochemistry

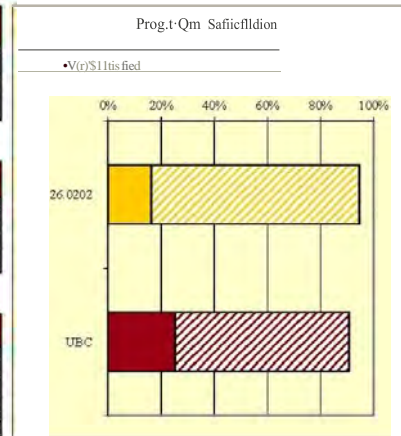


### EDUCATION FACULTY (L1, L2, L3) SKILL OF DEVELOPMENT

6. Usefulness of Ksmtt: dgt, Skill Hnd Abilities Acc11aiJ-ed durLn Pro am In W0rk:	26.0202			
Very Useful	6	38%	731	34%
somow11al uful		44%	959	45%
Not Very USful		13%	330	16%
Not at All Useful		6%	102	5%

7. U1-trfUnUS OF Knottdgt, SkWs, and AbldidU Atqlrt<l durinu, i>rOJD*in Oap, da Lifr.:	26.0202			
very Useful		25%	411	19%
Scmt'Y-4at Utful		38%	1,119	53%
Not Vtty u.ru1		31%	476	23%
Not at All US<ful		6%	108	5%

8. PrOSQ: illn Ss.lbfw, lion:	26.0202			
Very SaliSed	6	16%	707	25%
saliSed	29	78%	1,837	65%
DisSali&fied		5%	224	8%
Ve Dissatisfied		0%	41	1%
Total	37	100%	2809	100%



9. WOUld you stltt l thrsamt. rowain again?	26.0202			
Yes	19	66%	1,781	71%
No, becau5C... multi ere nse ucgion	10		719	
...intertStshave changed	3	12%	195	10%
...c&ms'swtic not pnc11ai1		15%	359	19%
...lilllc:urno career >1><rhutilitiS		27%	412	21%
...hu-	12	46%	961	50%

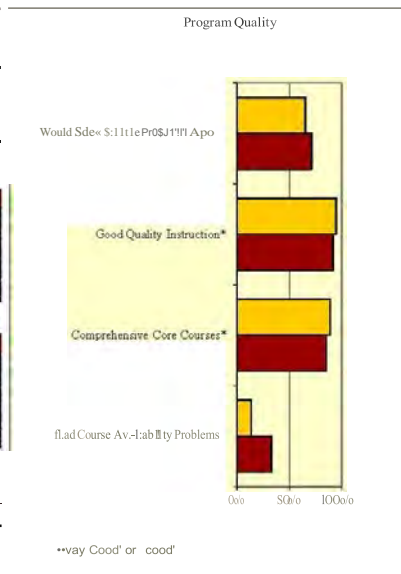
\* Percent of total responses, among those who would not take program again

10. Quality of Instruction:	26.0202			
Very Good	7	19%	1,119	26%
Good	28	76%	1,852	66%
Poor		5%	202	7%
Very Poor		0%	27	1%
Total	37	100%	2,815	100%

11. Comprehensiveness of Core Courses:	26.0202			
Very Good	6	16%	620	22%
Good	27	73%	1,738	63%
Poor	3	8%	358	13%
Very Poor	1	3%	45	2%
Total	37	100%	2,761	100%

12. Count Ava.Uabili :	26.0202			
fnecmtln/f cOmet l1vt11atall oblt4ll\$	5	14%	906	33%

13. Fbumdal Conslntlns:	26.0202			
Had 10mtL1T1J1-LarudicJ for Gnaudal ret1S00S	2	5%	235	
Had to L&kt lt.11 Jlr1 of ognrJn J&rl-time for G111mc1111rttSt*U	3	8%	325	12%





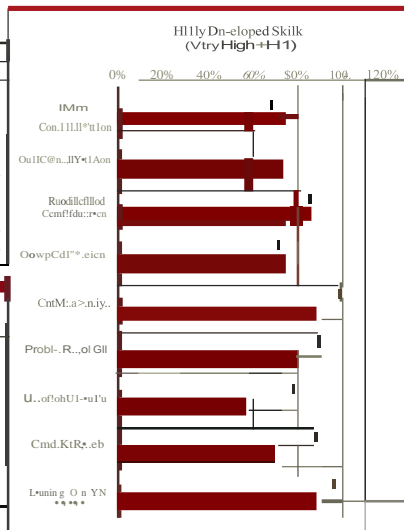
Faculty of Science  
University of British Columbia  
CIP Code: 26.0202: Biochemistry



### SKILL DEVELOPMENT

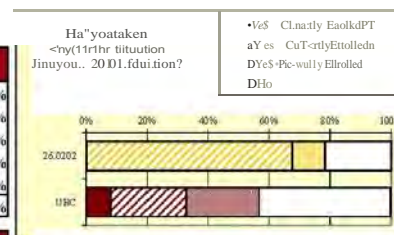
14a.

	26.0202				
	Very High	High	Low	Very Low	#
Did you develop the following skills?					
Written Communication	22%	46%	32%	0%	37
Oral Communication	8%	50%	42%	0%	36
Reading and Comprehension	24%	59%	16%	0%	37
Group Collaboration	14%	57%	24%	5%	37
Critical Analysis	35%	62%	3%	0%	37
Problem Resolution	26%	62%	12%	0%	34
Use of Mathematics Appropriate to Field	17%	60%	23%	0%	35
Conflict Research	38%	49%	8%	5%	37
Learning On Your Own	41%	54%	5%	0%	37



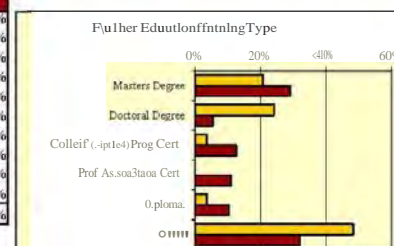
14b.

	26.0202				
	Very High	High	Low	Very Low	#
Did you develop the following skills?					
Written Communication	23%	52%	21%	4%	2,699
Oral Communication	20%	53%	23%	4%	2,747
Reading and Comprehension	31%	54%	13%	2%	2,757
Group Collaboration	27%	47%	22%	4%	2,771
Critical Analysis	40%	48%	11%	2%	2,800
Problem Resolution	22%	54%	21%	3%	2,726
Use of Mathematics Appropriate to Field	19%	38%	30%	13%	2,187
Use of Computer Skills Appropriate to Field	27%	42%	24%	7%	2,682
Learning On Your Own	41%	47%	10%	2%	2,777



15a.

	26.0202	UBC
Did you take a further education course since 2009?		
Yes	29	78%
No	4	11%
Currently enrolled part-time	25	68%
Currently enrolled full-time		0%
No		22%
Total	37	100%



15b.

	26.0202	UBC
Did you take a further education course since 2009?		
Yes	6	21%
No		24%
Currently enrolled part-time		3%
Currently enrolled full-time		0%
No		3%
Total		100%

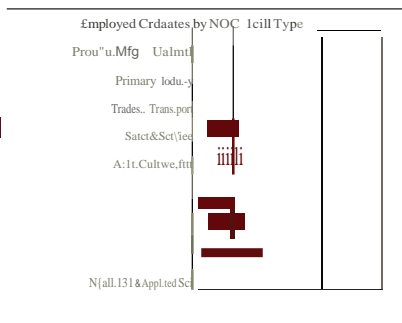
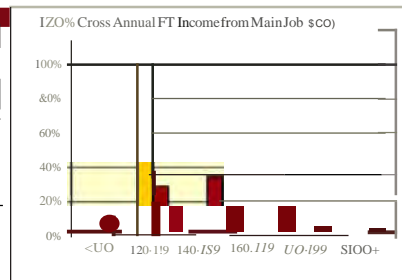
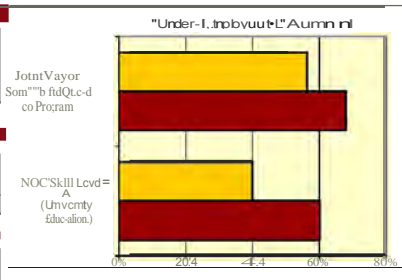
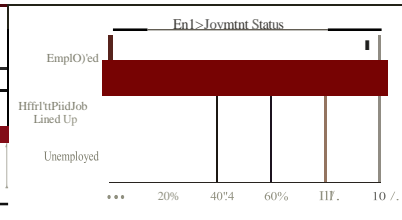
## Outcomes

Overall Summary of Survey Results  
 (Results) of British Columbia  
 CIP Code: 26.0202: Biochemistry



### DIPLOMA

16. Labour Force Status	26.0202			
In Labour Force (working or holding work)	17	46%	2,30	83%
Not in Labour Force	20	54%	493	17%
Grand Total	37	100%	2,623	100%
17. Employment Status of those in LMF - Outcomes	26.0202			
Employed	16	94%	2,129	
Have a Paid Job Lined Up		0%	27	
Unemployed	1	6%	174	7%
Total Labour Force	17	100%	2,30	100%
18. Status of Graduates Not in Labour Force	26.0202			
Attending School or	19	95%	387	
Attending School Yr		0%	8	
Other		5%	98	
Total NOT in Labour Force	20	100%	493	
19. Employment Status	26.0202			
Paid worker	15	94%	86	
Self-employed		0%	109	
Both a paid worker and self-employed		6%	150	
Total Employed	16	100%	2,129	100%
20. Employment Status	26.0202			
I hold more than one job	3	9%	437	
My main job is full-time (≥ 30 hours/week)	11	73%	1,676	
21. How related is your main job to your program?	26.0202			
Very Related		25%	853	41%
Somewhat Related		31%	590	28%
Not Very Related		19%	338	16%
Not At All Related		25%	342	16%
Total	16	100%	2,123	100%
22. Job is very or somewhat related to program	26.0202			
Job is very or somewhat related to program	9	56%	1,443	64%
NOC Skill Level = A (University Education)	6	40%	1,228	6%
23. Cross Annual Income from Main Job	26.0202			
Less than \$20,000	-	-	188	1%
\$20,000 to \$39,999	6	100%	500	2%
\$40,000 to \$59,999	-	-	598	3%
\$60,000 to \$79,999	-	-	290	1%
\$80,000 to \$99,999	-	-	78	0%
\$100,000 and Above	-	-	63	0%
Total	6	100%	1,717	100%
Median Annual Income (full time)	\$38,000		\$48,000	
Average Annual Income (full time)	\$19,317		\$51,333	
24. NOC Skill Level of Main Job:	26.0202			
Business, Finance and Administration	1	7%	384	1%
Natural and Applied Sciences and Related	4	27%	396	1%
Health	2	13%	206	1%
Social Sciences, Education, Services, and Health	6	40%	605	3%
Arts, Culture, Recreation and Sport	1	7%	158	0%
Sales and Service	1	7%	240	1%
Trades, Transportation and Equipment Operators and Related	0	0%	26	0%
University and Postsecondary	0	0%	9	0%
University of Applied Sciences, Manufacturing and Utilities	0	0%	8	0%
Total	15	100%	2,032	100%



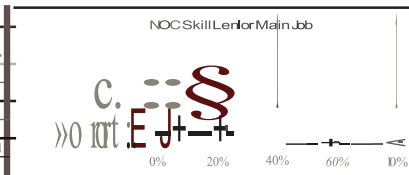
## Outcomes

Overall Summary of Survey Results  
 (In Years) of British Columbia  
 CIP Code: 26.0202: Biochemistry

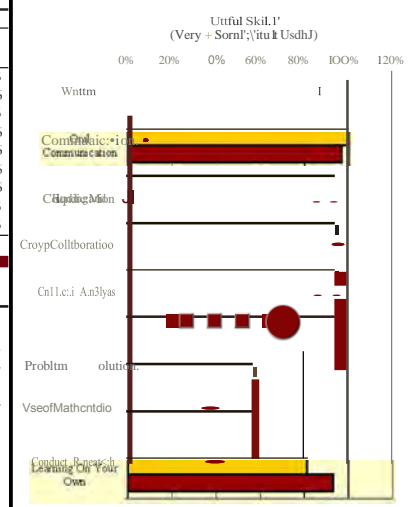
EMPLOYMENT OUTCOMES



25.	NOC Skill Level of Main Job:	26.0202			
	A. University Education	6	40%	1,228	600+
	S. College Education (at least 110 months of study)	6	40%	382	
	C. Secondary School + 10-12 months of training	3	20%	259	
	D. No formal education		0%		
	No skill level assigned		0%	142	
	Total	15	100%	2,040	1,011



	How useful are the following skills and abilities in doing your main job?	Very Useful	Somewhat Useful	Not Very Useful	Not at all Useful	# R^2 P
	Written Communication	56%	31%	8%	0%	16
	Oral Communication	69%	31%	0%	0%	16
	Reading and Comprehension	69%	25%	3%	0%	16
	Group Collaboration	69%	25%	6%	0%	16
	Critical Analysis	15%	19%	6%	0%	16
	Problem Resolution	56%	38%	6%	0%	16
	Use of Mathematics Appropriate to Field	25%	31%	31%	13%	16
	Use of Computer Technology Appropriate to Field	31%	25%	31%	13%	16
	Learn on Your Own	50%	31%	19%	0%	16



26b.	How useful are the following skills and abilities in doing your main job?	Very Useful	Somewhat Useful	Not Very Useful	Not at all Useful	# R^2 P
	Written Communication	68%	21%	6%	4%	2,116
	Oral Communication	81%	16%	2%	1%	2,117
	Reading and Comprehension	69%	24%	4%	2%	2,117
	Group Collaboration	80%	17%	3%	1%	2,117
	Critical Analysis	74%	19%	5%	2%	2,117
	Problem Resolution	80%	16%	3%	0%	2,117
	Use of Mathematics Appropriate to Field	32%	34%	22%	12%	2,100
	Ability to Communicate in Field	32%	33%	20%	14%	2,090
	Learn on Your Own	69%	24%	5%	2%	1,110

27a.	Top 10 Full-time Occupations (2010/2012) from the Census	% Employed in this Occ.
	NOC Skill Level Description	

\*data not displayed where n < 5

\*\*percentages cited are of those for whom occupational data was provided, full-time and part-time

27b.	Top 10 Full-time Occupations (2010/2012) from the Census	% Employed in this Occ.
	NOC Skill Level Description	
	4141 A Secondary School Teacher	6%
	4142 A Elem & Kindergarten Teacher	5%
	3152 A R.Sit. idNu CSI	5%
	1111 A Financial Auditors & Accountants	3%
	2131 A Civil Engineer	3%
	5124 A Occs in Public Relations & Commun	2%
	2132 A Mechanical Engineers	2%
	2173 A Software Engineer	2%
	2133 A Electrician & Electronics Fitters	2%
	2174 A Computer & Interactive Media Developer	2%

\*data not displayed where n < 5

\*\*percentages cited are of those for whom occupational data was provided, full-time and part-time

## Attachment 4: Interview Questions

1. Having read the concept paper and looked at the proposed program map:

A) What are your general opinions about this proposed degree?

B) What do you like about the program map?

C) Do you have any concerns about the program map?

2. Is the name of the degree (Forensic Science and Biochemistry) appropriate based on the program map?

A) Should the name be Biochemistry and Forensic Science?

B) Will the name of the degree be recognized by the forensic industry?

3. Would a graduate of this proposed program meet the minimum education requirements from your company/agency/discipline?

4. Our industry survey indicated that in the next five years, employment in the forensic science area will either remain steady or increase. Can you share your insight on the possibility of graduates from this proposed program gaining employment in this field?

5. Do you know approximately how many individuals does your organization hire each year? or how many individuals within your discipline?

6. How many individuals in your discipline does your organization employ?

7. Will you provide a letter of support for this proposed program?

### Optional Questions

8. Are the program goals sufficiently clear and appropriate?

9. Does the program map contain sufficient breadth and depth to accomplish the stated program goals?

## **Attachment 5: Interview Responses**



Mike Rosland  
Forensic Specialist, Toxicology  
Forensic Science & Identification Services  
Royal Canadian Mounted Police

BCIT/UBC Joint Degree Forensics Science and Biochemistry Interview Questions

1. Having read the concept paper and looked at the proposed program map:

- A) What are your general opinions about this proposed degree?

*I am of the opinion this will fill a gap in training in Western Canada.*

- B) What do you like about the program map?

*It tries to cover a large number of topics and will give students an exposure to many different fields of forensic science.*

- C) Do you have any concerns about the program map?

*I'm concerned that by giving such a wide exposure to the many different topics in forensic science, it may not fill the requirements for any program. In an attempt to be all things to all programs, I'm concerned it will be too little to give the specific courses required for some of the programs.*

2. Is the name of the degree (Forensic Science and Biochemistry) appropriate based on the program map?

- A) Should the name be reversed (Biochemistry and Forensic Science)?

*I don't think the arrangement is important.*

- B) Will the name of the degree be recognized by the forensic industry?

*I believe it would be.*

3. Would a graduate of this proposed program meet the minimum education requirements from your company/agency/discipline?

*Specifically in Toxicology, these graduates would not have a course in human physiology, so it would not meet the specific requirements. I cannot speak to the requirements of biology, chemistry, or firearms/too/marks. While this would not preclude a graduate from being hired in toxicology, they may not be competitive to others with similar training/experience and has a human physiology course.*

4. Our industry survey indicated that in the next five years, employment in the forensic science area will either remain steady or increase. Can you share your insight on the possibility of graduates from this proposed program gaining employment in this field?

*Federal funding is expected to be static or declining. I would expect growth to be negative or near zero in the next 5 years. I would expect positions from retirement or career change will be filled as usual.*

5. Do you know approximately how many individuals does your organization hire each year? or how many individuals within your discipline?

*I don't have the information on the number of individuals hired. The number of people in my program is approximately 40 to 50 people.*

6. How many individuals in your discipline does your organization employ?

*The RCMP employs approximately 25,000 people, however the forensic science program employs approximately 200 to 300 people.*

7. Would you be willing to provide a letter of support for this proposed program?

*I would personally be willing to provide a letter of support, but I would not be able to provide it on behalf of the RCMP Forensic Science & Identification Service.*

Chris Askew  
Forensic Scientist, Biology  
Centre of Forensic Sciences  
Northern Regional Laboratory

BCIT/UBC Joint Degree Forensics Science and Biochemistry Interview Questions

1. Having read the concept paper and looked at the proposed program map:

- A) What are your general opinions about this proposed degree?

*I like the proposed degree. In my opinion, the problem with forensic degrees is that they are often lacking natural science courses and the students don't acquire the necessary science fundamentals. I believe it's far easier for a forensic lab to train a strong scientist the forensic component than to teach them the science fundamentals. I like the course progression.*

- B) What do you like about the program map?

- C) Do you have any concerns about the program map?

*I would remove a calculus class and substitute it for a stats class instead as I think it's more relevant (see note below)*

2. Is the name of the degree (Forensic Science and Biochemistry) appropriate based on the program map?

*Yes*

- A) Should the name be reversed (Biochemistry and Forensic Science)?

*No*

- B) Will the name of the degree be recognized by the forensic industry?

*Yes*

3. Would a graduate of this proposed program meet the minimum education requirements from your company/agency/discipline?

*I recommend including a stats class. For forensic scientists/analysts a stats class is a requirement for the FBI standards (or sufficient training but it's best covered by a course). In other disciplines, uncertainty of measurements and basic statistical calculations are also important.*

4. Our industry survey indicated that in the next five years, employment in the forensic science area will either remain steady or increase. Can you share your insight on the possibility of graduates from this proposed program gaining employment in this field?

*I think this program is a great starting point. However, in order to increase the likelihood of employment, students may still have to take a M.Sc. I would suggest that if the 4<sup>th</sup> year research projects are done in a forensic lab (ie. RCMP/CFS) that would increase the student's chances on gaining employment at those labs in the future.*

5. Do you know approximately how many individuals does your organization hire each year? or how many individuals within your discipline?

*At the CFS, biology hires roughly 3-7 people per year (mainly at the technologist level).*

6. How many individuals in your discipline does your organization employ?

*Approximately 75 people in biology at the CFS*

7. Would you be willing to provide a letter of support for this proposed program?

*I do think the program is a great idea however since I'm not familiar with either the BCIT or UBC programs or the individuals who are leading the program and research projects, I don't feel comfortable providing a letter.*

## Appendix 8: Shared Resources and Facilities

As this program will be co-delivered by BCIT's Forensic Science and Technology Department and UBC's Department of Biochemistry and Molecular Biology there will need to a significant amount of cooperation, coordination and sharing of resources and facilities. Both departments are committed to working together to ensure the success of the proposed program. At BCIT we have a stakeholder meeting and numerous joint UBC and BCIT meetings to determine the best way to handle the administration of this program. At this time, a governance and administrative model similar to the Biotechnology program, which is currently a joint program between BCIT and UBC, is being proposed for this program. A table listing this roles and responsibilities is listed in Table 4 below:

**Table 4: BCIT and UBC Roles and Responsibilities for the Joint B.Sc. degree in Biochemistry and Forensic Science**

ITEMS	BCIT	UBC	NOTES
Lead institution	Y	Y	Home institution term by term
<b>RECRUITMENT AND MARKETING</b>			
Promotion of program and recruitment of students	Y	Y	Both
Web page presence	Y	Y	We will create one web page and link both institutes to it.
Advising	Y	Y	Both
<b>SETTING UP THE PROGRAM</b>			
Delivery	Y	Y	Both
Create Courses	Y	Y	Each institution will create their own course file.
Timetable	Y	Y	Each institution will create their own timetables.
Design Credential	Y	Y	The credential will be designed in partnership.
<b>ADMISSIONS</b>			
Admissions – receive and process	N	Y	We will use UBC's process since students will take the first-year entrance courses at UBC. Students must be successful in their first year to apply into their "major" (declaration).
Criminal Record Check	Y	N	BCIT will review students' criminal record checks.
Student ID numbers	Y	Y	Both
Application deadline	N	Y	Based on UBC's major declaration process
Registration	Y	Y	BCIT courses will be articulated at UBC and given UBC shell course numbers. Students will register at BCIT for BCIT courses and UBC for UBC courses. Students will register for BCIT shell courses (zero credits) at UBC so that UBC's online system knows that they are full time students.
Produce class List	Y	Y	Each institution will produce one overall class list for faculty review as needed.
<b>FINANCIAL</b>			
Tuition and ancillary fees	Y	Y	Tuition and fees will be paid by the student to both institutions.

ITEMS	BCIT	UBC	NOTES
<b>Financial Aid</b>	N	Y	Financial aid can be handled by UBC.
<b>Awards</b>	N	Y	Students will be eligible for awards at UBC. Students will not be eligible for Awards at BCIT unless we develop a special award for this program.
<b>Tax receipts</b>	Y	Y	Each institution will issue tax receipts.
<b>UPASS</b>	N	Y	Students will be eligible through UBC. BCIT will exempt students and will use an “other institute” indicator on Banner.
<b>Extended Health Fee</b>	N	Y	Students will opt out of BCIT and be covered by UBC
<b>Student Card</b>	Y	Y	Students will get an ID from both institutions.
<b>STUDENT RECORDS</b>			
<b>Produce class lists for continuing students</b>	Y	Y	Each institute will issue them once the term end review is completed.
<b>Continue to UBC/BCIT</b>	Y	Y	Based on faculty review process—notification to be sent to the Registrar of each institution.
<b>Course Credit/PLAR</b>	Y	Y	Each institute will assess and determine Credit and PLAR. We will need to come up with a communication strategy to ensure that students maintain the minimum amount of credit to be recognized as a full-time student.
<b>Calculation of Credits</b>	TBD	TBD	To be determined
<b>GPA Calculation &amp; Grade type (% vs letter grade)</b>	%	%	Grade types are both %; however, the calculation of the overall GPA is to be determined.
<b>Marks submission</b>	Y	Y	Submitted via each institution's process. Develop a format to send to the faculty review committee.
<b>Marks review process</b>	Y	Y	Each to follow their own
<b>Transcript</b>	Y	Y	Each institution will make a notation on their transcript regarding the partnership, using the same wording as with the joint Biotechnology program. The UBC transcript will list BCIT shell courses so that UBC knows that the students are full time.
<b>Graduation audit</b>	Y	Y	Joint sessional evaluation
<b>Conferring of Credential</b>	Y	Y	Jointly
<b>Attend convocation</b>	Y	Y	Students may attend both. UBC grads must go through the Senate prior to graduation. Students must complete the UBC convocation before they can

ITEMS	BCIT	UBC	NOTES
			attend the BCIT convocation.
<b>REGISTRAR'S SERVICES</b>			
<b>Enrolment verification, address and name change</b>	N	Y	UBC will handle enrolment verification. Students will have to change their personal information at both institutions.
<b>OTHER</b>			
<b>Disability Resources/Access and Diversity</b>	Y	Y	Access to disability resources will be provided by both institutions.
<b>Student housing</b>	N	Y	UBC only
<b>FTE Reporting</b>	Y	Y	Both
<b>Program/curriculum changes</b>	Y	Y	Each institution will ensure that the other knows of any changes.
<b>Student Related policy: Attendance, Withdrawal, Non-Academic Conduct, Student Regulations and Code of Conduct, Academic Appeal Policies and Processes</b>	Y	Y	Both institutions student regulations and code of conduct (including attendance, withdrawal, non-academic conduct, student regulations and code of conduct, academic appeal policies) will apply to students while in this joint program. Both institutions will consult with each other on academic and non-academic issues. During the application process students will need provide consent to UBC and BCIT sharing information related to student policy.
<b>Indemnity and Liability</b>	TBD	TBD	To be determined



15 February 2017

To: Vancouver Senate

From: Senate Curriculum Committee

Re: Bachelor of Design in Architecture, Landscape Architecture and Urbanism (approval)

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The Senate Curriculum and Admissions Committees have reviewed the material forwarded to them by the Faculty of Applied Science and enclose those proposals they deem ready for approval.

The following is recommended to Senate:

**Motion:** *“That the new Bachelor of Design in Architecture, Landscape Architecture and Urbanism degree program, to be administered by the Faculty of Applied Science, and its associated new courses be approved.”*

Respectfully submitted,

Dr. Peter Marshall, Chair, Senate Curriculum Committee

Dr. Robert Sparks, Chair, Senate Admissions Committee

The University of British Columbia

Faculty of Applied Science

School of Architecture and Landscape Architecture

Program Change Proposal

**Bachelor of Design in Architecture, Landscape Architecture and Urbanism**

**B.Des.**

## **Executive Summary and General Program Description**

**November 01, 2016**

REVISED **December 11, 2016**

REVISED **January 25, 2017**

Faculty Approval of Curriculum: March 3, 2016

Faculty Approval of Degree Name Change: September 21, 2016

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**REVISIONS December 11, 2016:**

- Slight reordering of information based on feedback we received ie. Demand for Program comes after Program Description in revised version.
- Addition of the following sections:
  - 3.6. Justification of All-Honours Program
  - 3.8. Second-year transfer students
  - 3.9. Exit Plan for Student Who Do Not Thrive
- Editing of the following sections:
  - 3.7. Development and Support of First-Year Cohort
- Redesign of relationship of first-year entry students to second-year transfer students: we now limit first-year enrollment to 20 students and maintain 10+ spots for second year transfer students.
- Rewriting of Program Requirements to allow for easier access for second-year transfer students.

**REVISIONS January 25, 2017:**

- Deletion of any references to B.Des. All-Honours Program
- Amendments to Admission Requirements and Transfer from Post-Secondary Study
- Summary of Student Consultation and Response 3.4.3 + 3.4.4
- Revisions to 3.8. Admission and Transfer Requirements for Post-Secondary Applicants
- Description of Honours Option 3.6. Honours Option

- Revisions to 3.9 now titled First Year Exit

## **1. Executive Summary**

### **1.1. Overview**

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

The Bachelor of Design in Architecture, Landscape Architecture and Urbanism offers undergraduate design education in Architecture, Landscape Architecture and Urban Design. The interdisciplinary curriculum explores the connectedness of design across multiple scales, from the body to the fabric of the city. The program teaches students to observe how design impacts society and the environment, as well as how cultural changes can be effected through the shaping of space and form. The program also teaches students to envision alternative constructs that are both socially and ecologically sustainable. The B.Des. program prepares students to undertake a self-directed path towards a number of possible futures including graduate studies in Architecture, Landscape Architecture, Urban Design, and other allied fields of design. The program is distinctive in Canada as the education integrates architecture and landscape architecture for the duration of the program, producing graduates with a unique skill set that is broadly applicable to many career choices.

### **1.2. Credential**

The credential awarded will be the Bachelor of Design in Architecture, Landscape Architecture, and Urbanism. The degree will be a Bachelor's degree with a focus on design. Additional curriculum will address the history and theory of design, technological aspects of design, media related to design, and the professional practice of design. An Honours option is available in the fourth year of study; the option recognizes high academic performance and gives students the opportunity to pursue more independent and self-directed design work in the final semester.

### **1.3. Location**

The Vancouver Campus of UBC is the main location for classroom education and administration.

#### **1.4. Faculty Offering Program**

The program will be offered formally, administrated and delivered by the School of Architecture and Landscape Architecture (SALA), within the Faculty of Applied Science, UBC.

#### **1.5. Program Start Date and Completion Time**

The program will be offered in the 2018/2019 academic year and begin in September of 2018. The program is a 4-year, 133 credit, Bachelor's degree program. The Honours option is also 4-years, 133 credits. Students who apply to and are eligible for the Honours option complete their study with a more independent design studio experience in the last term. Students not admitted to the Honours option will complete a structured final design studio.

### **2. Program Rationale**

#### **2.1. History and Process**

The B.Des. program grows out of the Bachelor of Environmental Design (B.En.D.) program at the School of Architecture and Landscape Architecture. The B.En.D. program was officially launched in 2002. It has incrementally grown in size from an incoming class of 16 students in 2002, 25 in 2009, and 30 in 2013.

An ad hoc committee was struck in 2012 with the mandate to strategize the future of the B.En.D. program. The work of the committee included assessing the program internally, and surveying curricular and teaching models of other institutions. In 2013, the B.En.D. program began offering 200-level service courses open to all UBC students. The success of the 200-level courses, as well as the continued interest in the degree, motivated the School to consider how to expand the curriculum from a two-year program entered after 60 credits of undergraduate-level coursework, to a four-year, first-year entry program.

The following summarizes the most significant findings of the research that contributed to the decision to develop a new Bachelor of Design degree as proposed in this document.

- Regarding matching interest: The level of interest in both the annual open house for prospective students to the B.En.D. program as well as the 200-level open survey course that are offered to the UBC student community, indicate that there is a demand for an undergraduate degree in design that is currently not being met. The program currently has space for one of three eligible applicants.
- Regarding adding a first-year entry: Because the current B.En.D. program only accepts students after 60 credits of undergraduate-level coursework (typically two years), secondary school students are looking elsewhere to first-year entry undergraduate design programs in other provinces in Canada or in the United States. They know that entry into the current B.En.D. program is competitive, so many opt for a guaranteed path rather than risk an indeterminate one.
- Regarding design curricula in other schools: The majority of comparable undergraduate degrees in design take more than two years to deliver their curricula. Expanding the curriculum of the program from two to four years allows the School to graduate designers with a broader and deeper set of skills, better preparing them to compete for employment or entry into graduate design programs with more advanced standing.
- Regarding the value of the B.Des. Program to the School of Architecture and Landscape Architecture: The B.En.D.s. program has been a productive test-bed for the School, a place where pedagogic models are beta-tested, and a place where our graduate students learn to lead and teach as teaching assistants. In addition, the B.En.Ds. program has already established a strong reputation in both the world of academia and that of practice. Increasing the quality of our Bachelor's level graduates promotes SALA's reputation in both of these realms.
- Regarding the ability of the B.Des. program to stay competitive: There is a trend towards an expansion of undergraduate degrees in design. One of the most significant of schools and one of our strongest competitors, University of Toronto, has redesigned their two undergraduate degrees in design to be more broadly applicable to a wider range of graduate degrees and professions.

## **2.2. Proposed Program vs. Current Program**

The Proposed Program builds upon the existing B.En.D. degree but makes changes to the degree in the following ways:



- Change admission requirements in order to admit the majority of students to first-year entry program (up to 20 students) and allow for second-year transfer students (the balance of the class to create a cohort of 30 students).
- Expand each of the current four study streams of design, history and theory, technology and sustainability, and design media including the expansion of the urban design component within the four study streams and add a fifth study stream of professional practice.
- Add a Co-operative Education option and a Coordinated International Experience option.
- Increase overall student body from 60 students to 120 by 2020. The B.Des. degree aspires to eventually grow to 180 students, an option that will be revisited once the new program is established and additional space can be secured.

### **2.3. Decision to Change Name and Course Code**

The Bachelor of Environmental Degree name draws from a period in time when practitioners and educators of the built environment (architects, landscape architects and urbanists) sought to integrate their knowledge and practice. The core mission of the B.En.D. program is to educate the next generation of designers with an interdisciplinary curriculum that explores the connectedness of design across multiple scales. This mission, from the launch of the B.En.D program, to now, remains consistent. However, for several reasons, the SALA faculty have voted to change the name of the program and associated course code:

- “Environmental Design” consistently creates confusion amongst peoples within and outside of academia and the professional disciplines. This confusion is amplified outside of the North American context; the Environmental Design movement did not travel to Europe, Asia, Africa or Australia. This is a concern for recruitment, for communication within UBC, and for the ability of our graduate students to communicate with graduate programs and potential employers.
- The new curriculum for the B.Des. program is a more robust education in design and design thinking; there is a value in differentiating the education of alumni with the B.En.D. degree and alumni with the B.Des. degree to communicate clearly to employers and graduate schools which curriculum the respective alumni received.
- The expanded scope of the curriculum more closely aligns the education with Bachelor of Design degrees across North America and Australia. In addition, the new curriculum is designed to

attract secondary school students who are broadly interested in design; and the new curriculum is designed to graduate students with a specialized skill set in design that is broadly applicable to many career paths.

- Giving the new program a new name allows SALA to brand the program reboot and have better success recruiting from a new cohort of high school-aged prospective students.

After several focused meeting and discussions on the topic, the SALA faculty voted to change the name of the program to *Bachelor of Design in Architecture, Landscape Architecture and Urbanism*.

The Program is co-taught by faculty members in SALA's Architecture and Landscape Architecture Program. In addition, the urban scale has had a presence in the curriculum of the B.En.D program since its inception and continues to have presence in the B.Des. curriculum. Students will take design studios in landscape architecture and architecture, and then synthesize these two disciplines, adding the urban scale in their fourth year of study. In terms of coursework, students have core courses in the history and theory of architecture, landscape architecture and urbanism. In terms of technical courses, students learn how to analyze sites and landscapes, calculate building structure, understand material systems for buildings and landscapes, and learn about how urban form is linked to environmental and social systems. Due to the breadth of the curriculum at the urban scale, from design to history and theory to technical aspects of urban systems and infrastructure, urbanism was selected as the most descriptive term. With the name change, the course code of DES has been selected as it more directly flows from the Bachelor of Design.

### **3. Program Description and Specifications**

#### **3.1. Program Overview**

##### *3.1.1. Mission*

The B.Des. program aims to lead Canadian undergraduate design education with a unique pedagogy, curriculum and infrastructure and to serve as a model of studio-learning, technology in learning, collaborative learning, and community-based learning for undergraduate education at UBC. The Program features an interdisciplinary learning environment that explores the connectedness of design across multiple scales: from the design of objects to architecture; from landscape architecture to urban design. As a comprehensive design education, the program teaches students to observe how design

impacts society and the environment and aims to graduate leaders and entrepreneurs with the skills to launch ideas into action.

### *3.1.2. Program Objectives*

- Equip tomorrow's design leaders and practitioners with the critical thinking and practical skills necessary to make positive and meaningful contributions to the creation of designed environments at many scales.
- Capitalize on the Vancouver region's offerings as an international leader in environmentally sustainable design experimentation by providing a unique and rich local learning laboratory for students from British Columbia, other Canadian provinces, and abroad.
- Offer students an interdisciplinary, project-based curriculum that explores innovation in design thinking.
- Emerge as a magnet, attracting the world's top undergraduate design students and thinkers to engage in a critical discourse on the region and beyond.
- Continue to develop and build on SALA's high profile faculty with individuals who bring international expertise in the theory and practice of design, providing students greater opportunity to pursue further specialized degrees in design and/or to enter into the design field with their own entrepreneurial goals.

### **3.2. Contributions to UBC Mandate and Strategic Plan**

The advancement of a socially and environmentally sustainable society is central to the UBC mission. These principles lie at the very core of the B.Des.' program's mandate. The B.Des. program will act as an incubator and catalyst for advancing transformational design ideas, to inspire collaborative actions, and to shape sustainable and just urban environments. Our experiential learning philosophy aims to foster the development of new modes of cross-disciplinary teaching and practice. This engaged learning process will also provide new opportunities for collaboration between UBC and community partners.

### **3.3. Admissions Requirements**

All applicants will be evaluated on the breadth of the application including the applicant's academic achievement and intellectual readiness, and evidence of creativity and design aptitude to select the most competitive students for the Bachelor of Design in Architecture, Landscape Architecture and Urbanism.

Admission from Secondary School requires that the applicant satisfy general university admission requirements as appropriate to the secondary school curriculum being presented and have completed either History or Geography at the BC Grade 12 level or the equivalent.

Admission and Transfer from Post-Secondary Study requires an overall average of 65% or better calculated on the most recent transferable credits with a minimum of 24 and a maximum of 30 transferable post-secondary credits, including any failed courses.

In addition, post-secondary applicants require a minimum core design average of 65% or better on all attempts of DES 110, 200, 220, 230, VISA 180 or their equivalent.

Additional requirements for all applicants to the Bachelor of Design consists of participation in a video interview as a component of the Personal Profile, completion of a Creative Test and submission of a 1-2 page Resume.

To be eligible for consideration for admission to second year standing, applicants must have completed the following UBC requirements or their equivalent:

- . Reading requirement as described in year one requirements (3 credits)
- . Writing requirement as described in year one requirements (3 credits)
- . Geography requirement as described in year one requirements (3 credits)
- . 6 – 12 credits electives
- . 6 credits of DES 200, 220, 230 and 3 credits of DES 110 or VISA 180

Students with 24 or more transferable credits who are deficient in more than one of the above requirements will be considered for first year only.

UBC's procedures, policies and general undergraduate admission requirements are specified in the Admissions section of the UBC Vancouver Academic Calendar. Additional information is available at [you.ubc.ca](http://you.ubc.ca) and [sala.ubc.ca](http://sala.ubc.ca).

### **3.4. Curriculum Overview**

The proposed curriculum for the B.Des. program extends the current curriculum in both length and breadth. Currently B.En.D. students complete a total of 132 credits to receive the Honours degree, including 63 credits in required SALA courses. In the proposed curriculum, B.Des. students will complete a total of 133 credits with 91 credits in required SALA courses (and 9 credits in required courses outside of SALA). The curriculum of the B.Des. degree unfolds in a series of study streams: Design, Design Media, History and Theory of Design, Technology and Sustainability and Professional Practice.

The 28 B.Des. credits that have been added extend two study streams of the curriculum and add a new stream in Professional Practice:

- The History and Theory of Design Stream is extended with the addition of a large survey course that uses Vancouver as a laboratory to examine the historical transformation of the built environment.
- The Design Stream itself, which unfolds through a series of design studios, is extended with the addition of two new foundational design studios. These two new courses increase the number of studios required for the degree from four to six.
- The curriculum is broadened by a category of classes and experiences defined as Professional Practice. Within this new category, a required class has been added to the curriculum that links design thinking to entrepreneurial thinking and the ethics of practice. In addition, a Co-operative Education Program and a Coordinated International Experience (CIE) option have been added to the B.Des. curriculum.
- The Co-operative Education Program provides relevant, faculty-monitored and paid work experience for motivated and qualified students. Co-op terms are 4 months long and are available by application. The Co-op is available to students who choose to participate for one, two, three, or more terms. Students who complete three work terms or more (18 or more credits) including two terms in the Winter Session and one term in the Summer Session will have successfully completed the requirements for the full Co-operative Education Program; this will be reflected on students' transcript and parchment.
- The Coordinated International Experience Program (CIE) offers students the opportunity to apply to study a pre-selected and pre-approved set of courses over one academic term at an international CIE partner institution. The student gains new, global perspectives with the credit received from courses completed counting towards the student's B.Des. degree.

#### *3.4.1. Learning Outcomes*

Students who complete the B.Des. program will be able to:

- Approach the design of places imaginatively and creatively.
- Think spatially and holistically about the design of buildings, neighbourhoods, cities and regions.

- Think critically about architecture, landscape architecture and urban design history and theory and apply it to design.
- Integrate design thinking and making across a variety of scales
- Analyze local conditions and contexts and adapt sustainable design solutions accordingly.
- Exercise a wide range of communication skills, including graphic, written and verbal.
- Emerge as critical thinkers who can challenge the status quo and offer design solutions that bridge the theoretical and practical gaps between the disciplines of architecture, landscape architecture and urban design. For the discipline of design, critical thinking pertains to the ability to leverage knowledge of the history, theory and precedents of the discipline and identify a position that challenging to this knowledge.

The B.Des. degree is not a professional degree in Architecture, Landscape or Urban Design; instead it offers a rich foundation in design at a variety of scales that leads to graduate programs of design. In most cases, students interested in obtaining professional degrees in Architecture, Landscape Architecture or Urban Design can use many of the courses from the B.Des. curriculum to achieve advanced placement or course waivers from graduate schools. Students interested in pursuing degrees in allied professions can also use many of the courses to advance themselves in their respective curricula. Students interested in pursuing careers outside of design such as law or business will find that their rigorous education in problem-based learning will provide a useful base.

#### *3.4.2. Distinctive Characteristics*

The B.Des. program is the only undergraduate design degree in Canada that actively integrates architecture, landscape architecture and urbanism throughout the duration of the degree. In addition, the commitment to sustainable design that distinguishes SALA from other design schools in Canada is a core value of the B.Des. degree and is disseminated throughout the courses in the various subject areas.

Other prominent undergraduate degrees in design in Canada either teach only one discipline, usually architecture (ie. University of Waterloo's Honours Bachelor of Architectural Studies, University of Toronto's Bachelor of Arts, Visual Studies and Bachelor of Arts, Architectural Studies, and Dalhousie's Bachelor of Environmental Design Studies Program). If a program integrates Architecture and Landscape Architecture and Urbanism, the integration is only for the foundation years and the students choose a

stream such as Architecture, Landscape Architecture, etc. to specialize in for the last two years of their program (ie. University of Manitoba's Bachelor of Environmental Design).

Within British Columbia, the only other institution that offers a Bachelor's level degree related to Architecture or Landscape Architecture is the British Columbia Institute of Technology (BCIT). BCIT's Bachelor degree in Architectural Science is a 4-year program in the "theoretical and applied aspects of architectural science" (BCIT website). The BCIT Bachelor of Architectural Science differs from the proposed B.Des. program in the following ways: it is a technical degree rather than a design degree, it is focused on architecture only, it is delivered within the context of an Institute of Technology rather than a University.

Other Bachelor of Design degrees in British Columbia include the Bachelor of Design in Visual Communication from Capilano University, the Bachelor of Design in Communication, Industrial Design, or Interaction Design from Emily Carr University, and the Bachelor of Design in Fashion Technology, Graphic Design or Product Design from Kwantlen Polytechnic University. The Bachelor of Design is a broadly used degree, and in other countries such as the United States and Australia, denotes an education related to the built environment. However, because "Bachelor of Design" is so broadly applicable, the focus "in Architecture, Landscape Architecture, and Urbanism" has been added.

#### *3.4.3. Student Consultation*

A student consultation was conducted in December 2016 to receive input and feedback on the B.Des. Program Proposal. The students have been consulted informally throughout the 3-year process of conceiving of the new Program. The formal consultation was a sufficient way to get formal feedback. The student consultation is included in Appendix F: Consultations. The students commented on three aspects of the Program Proposal: First-Year Entry, Hot-Desks (not dedicated desks) in the second year studio, and making Entrepreneurship and Ethics mandatory.

#### *3.4.4 Response to Student Consultation*

##### **Regarding First Year Entry:**

The students voiced concern over the switch to a first-year entry because they feel that students coming out of high school "do not have a clear idea of what path they want to pursue". Because our current Bachelor's program is a third-year entry program, this opinion probably matches their own experience

transitioning from secondary school to university. Our research shows that of our peer institutions in Canada, University of Waterloo and University of Toronto are both first-year entry programs, so in order to stay competitive with these programs and to give local students in BC, who know they want to study design, an option to study here, we believe strongly in a first-year entry option.

Further, our School is launching a Summer Discovery Program that will introduce interested secondary school age students to the design professions. We hope that this program will be a good recruitment vehicle for the B.Des. Program.

Finally, we have decided to accept up to 2/3 of our cohort in the first-year and to retain a sizeable (10+ seats) side door for students to transfer into the program. This will allow students who were not aware of the B.Des. program until their post-secondary education, to apply to transfer into the program.

**Regarding Hot-desks in the second-year studio:**

The students expressed concern about the allocation of a hot-desk studio to the second year studios. A hot-desk studio is a room designed for 30 students to work during class hours, and then to work informally in outside of class hours. However, the studio is smaller in size than the 3<sup>rd</sup> and 4<sup>th</sup> year design studio as there are no dedicated desks to each student. Our decision to allocate a hot-desk studio to the 2<sup>nd</sup> years is to balance our resources with our academic expectations from the courses. The 2<sup>nd</sup> year studios are 6 credits (upper-level studio are 9 credits) so there is a different expectation of how much time students will work in studio. We are also eager to create healthy and reasonable work habits around the design studio in the 2<sup>nd</sup> year, so to not allow students to “live” in studio is where we believe it’s important to start.

**Regarding requiring the course Entrepreneurship and Ethics:**

The students expressed concern about making the new Professional Development course in Entrepreneurship and Ethics, a required course. We believe it’s a deeply important course for any student in the design profession, and a course that will set our graduates apart from our peer institutions.

**3.5. Program Requirements**

B.Des. students graduate with 133 credits. The B.Des. program unfolds over four years. The program provides 91 credits of coursework in design, history and theory, technology, design media and



professional practice. In addition, the program requires 9 credits of required General University courses including a Reading requirement, a Writing requirement and a Geography requirement. Finally the students are required to complete 33 credits of elective course work. Further information on the requirements is available in the Calendar Statement.

### *3.5.1 Course Delivery and Core Classes*

All courses within the B.Des curriculum are delivered in classrooms and design studios. There is no on-line curriculum in the degree.

The heart of the B.Des program is the design studio. The studio space is an important place where project-based learning and the collaborative design process can unfold. In the second year of study, students will first experience the studio in the “hot desk” model, which means that students do not have dedicated desks to work at, but can use a studio room to work in during class and outside of class. In the third year through the fourth year, students will transition to dedicated desks from which to do their work during and outside of class.

Non-design courses in the B.Des. program are delivered in more conventional formats. The majority will meet within a lecture room or a large seminar room for lectures, presentations and discussions.

Both the design studios as well as the non-design courses will often have a field-work component that could range from stepping out to the Main Mall of campus to hand-sketch, to taking a bus downtown to measure and analyze a space or a site, to taking a Skytrain to the next municipality to analyze a site.

### *3.5.2. Courses offered in the B.Des. Curriculum*

B.Des. Courses	Credits	Term	Instructor	New/Extg
DES 101: Introductory Workshop	1	W1	SALA faculty	Ext – soft-launch 2017W
DES 110: Measured Architectural Drafting	3	W1 + W2	SALA faculty /Adjunct	Ext – soft-launch 2016W
DES 200: Design Thinking	3	W2	SALA faculty	Extg/ rename ENDS 231
DES 201: Design Studio I - Context and Site	6	W1	SALA faculty /Adjunct	New
DES 202: Design Studio II - Form	6	W2	SALA faculty /Adjunct	New
DES 211: Design Media I	3	W1	SALA faculty	Extg/ rename ENDS 320

DES 212: Design Media II	3	W2	SALA faculty	Extg/ rename ARCH 437
DES 220: Architecture in Context: Vancouver and the Region	3	W1	SALA faculty /Adjunct	Ext – soft- launched 2016W
DES 230: Sustainability by Design	3	W2	SALA faculty	Extg/ rename ENDS 221
DES 231: Site Analysis and Planning	3	W1	SALA faculty /Adjunct	Extg/ rename LARC 440
DES 232: Material Culture	3	W2	SALA faculty /Adjunct	Extg/ rename ARCH 411
DES 301: Design Studio III - Building Scale Synthesis	9	W1	SALA faculty	New
DES 302: Design Studio IV - Vancouver – or CIE Option	9	W2	SALA faculty	New
DES 321: Architectural History I	3	W1	SALA faculty	Extg/ rename ARCH 404
DES 322: Architectural History II	3	W1	SALA faculty	Extg/ rename ARCH 405
DES 323: Histories in Landscape Architecture	3	W2	SALA faculty	New
DES 330: Structural Systems and Supports	3	W1	SALA faculty /Adjunct	New
DES 341: Co-operative Education I	(6)	S	-	New
DES 350: Design Build	3	S	SALA faculty	New
DES 401: Design Studio V - Urban Systems Synthesis	9	W1	SALA faculty	Extg/ rename ENDS 402
DES 402: Design Studio VI – Away Studio	9	W2	SALA faculty	New
DES 403: Senior Design Project	9	W2	SALA faculty	New
DES 421: Design Theory	3	W1	SALA faculty	Extg/ rename ARCH 403
DES 422: Urbanism by Design	3	W1	SALA faculty	New
DES 430: Environment, Urban Form and Infrastructure	3	W1	SALA faculty /Adjunct	Extg/ rename ENDS 440
DES 442: Co-operative Education II	(6)	W1	-	New
DES 443: Co-operative Education III	(6)	W2	-	New
DES 444: Co-operative Education IV	(6)	S	-	New
DES 445: Entrepreneurship and Ethics in Design	3	W1	SALA faculty /Adjunct	New
DES 450: Special Topics	3	W2	SALA faculty /Adjunct	Extg/ rename ENDS 482

# **PROMISED B.D.'S CURRICULUM**

Design	2011101: Intro to Urban Design	2011100: Design Thinking	2011101: Design Thinking: Contextualized	2011101: Design Thinking: Form	2011100: Design Thinking: Building Case Studies	2011101: Design Thinking: Vancouver	2011101: Design Thinking: Urban Systems and Systems	2011101: Design Thinking: Urban Systems	2011101: Design Thinking: Urban Systems
History & Theory	2011101: Architecture in Context: Vancouver and the Region	2011101: Architecture History I	2011101: Architecture History II	2011101: Architecture History III	2011101: Architecture History IV	2011101: Architecture History V	2011101: Architecture History VI	2011101: Architecture History VII	2011101: Architecture History VIII
Technology	2011101: Sustainability by Design	2011101: Sustainability by Design	2011101: Sustainability by Design	2011101: Sustainability by Design	2011101: Sustainability by Design	2011101: Sustainability by Design	2011101: Sustainability by Design	2011101: Sustainability by Design	2011101: Sustainability by Design
Design & Media	2011101: Narrative Architectural Drawing	2011101: Narrative Architectural Drawing	2011101: Narrative Architectural Drawing	2011101: Narrative Architectural Drawing	2011101: Narrative Architectural Drawing	2011101: Narrative Architectural Drawing	2011101: Narrative Architectural Drawing	2011101: Narrative Architectural Drawing	2011101: Narrative Architectural Drawing
Professional Practice	2011101: Cooperative Education I	2011101: Cooperative Education II	2011101: Cooperative Education III	2011101: Cooperative Education IV	2011101: Cooperative Education V	2011101: Cooperative Education VI	2011101: Cooperative Education VII	2011101: Cooperative Education VIII	2011101: Cooperative Education IX
Design Studio	2011101: Design Studio I	2011101: Design Studio II	2011101: Design Studio III	2011101: Design Studio IV	2011101: Design Studio V	2011101: Design Studio VI	2011101: Design Studio VII	2011101: Design Studio VIII	2011101: Design Studio IX

### 3.5.3. Outline of Program for a Typical Student

<b>Year 1 – 31 cr</b>	<b>Credits</b>
DES 101: Introductory Workshop	1
DES 200: Design Thinking	3
DES 220: Architecture in Context – Vancouver and its Region	3
DES 230: Sustainability by Design	3
DES 110: Measured Architectural Drafting	3
Reading Requirement	3
Writing Requirement	3
Geography Requirement	3
Electives	9
<b>Year 2 – 30 cr</b>	
DES 201: Design Studio I - Context and Site	6
DES 202: Design Studio II – Form	6
DES 211 Design Media I	3
DES 212: Design Media II	3
DES 321: Architectural History I	3
DES 231: Site Analysis and Planning	3
DES 232: Material Culture	3
Electives	3
<b>Year 3 – 36 cr</b>	
DES 301: Design Studio III - Building Scale Synthesis	9
DES 302: Design Studio IV: Vancouver Studio <b>or</b> Coordinated International Exchange (CIE)	9
DES 323: Histories in Landscape Architecture	3
DES 421: Design Theory	3
DES 330: Structural Systems and Supports	3
DES 350: Design Build Elective	3
Electives	9
<b>Year 4 – 36 cr</b>	
DES 401: Design Studio V – Urban Systems Scale Synthesis	9
DES 402: Design Studio VI – Away Studio	9
DES 421: Urbanism by Design	3
DES 430: Environment, Urban Form and Infrastructure	3
DES 445: Entrepreneurship and Ethics in Design	3
DES 450: Special Topics	3
Electives	3
<b>TOTAL CREDITS</b>	<b>133</b>

### B. Dec. TYPICAL STUDY PLAN 1

Project ID	Project Name	Phase	Start Date	End Date	Status	Progress (%)	Owner
001	Project Alpha	Phase 1	2023-01-15	2023-03-31	Completed	100	John Doe
002	Project Beta	Phase 2	2023-04-01	2023-06-30	In Progress	75	Jane Smith
003	Project Gamma	Phase 3	2023-07-01	2023-09-30	On Hold	20	Mike Johnson
004	Project Delta	Phase 1	2023-10-01	2023-12-31	Not Started	0	Sarah Lee
005	Project Epsilon	Phase 2	2024-01-01	2024-03-31	In Progress	50	David Kim
006	Project Zeta	Phase 3	2024-04-01	2024-06-30	On Hold	10	Emily White
007	Project Eta	Phase 1	2024-07-01	2024-09-30	Not Started	0	Chris Brown
008	Project Theta	Phase 2	2024-10-01	2024-12-31	In Progress	30	Alex Green
009	Project Iota	Phase 3	2025-01-01	2025-03-31	On Hold	5	Nina Black
010	Project Kappa	Phase 1	2025-04-01	2025-06-30	Not Started	0	Leo Gold

### 3.5.4. Outline of Program for a Student taking Co-operative Education Option as well as Honours Option

<b>Year 1 – 31 cr</b>	<b>Credits</b>
DES 101: Introductory Workshop	1
DES 200: Design Thinking	3
DES 220: Architecture in Context – Vancouver and its Region	3
DES 230: Sustainability by Design	3
DES 110: Measured Architectural Drafting	3
Reading Requirement	3
Writing Requirement	3
Geography Requirement	3
Electives	9
<b>Year 2 – 30 cr</b>	
DES 201: Design Studio I - Context and Site	6
DES 201: Design Studio II – Form	6
DES 211 Design Media I	3
DES 212: Design Media II	3
DES 321: Architectural History I	3
DES 231: Site Analysis and Planning	3
DES 232: Material Culture	3
Electives	3
<b>Year 3 – 36 cr</b>	
DES 301: Design Studio III - Building Scale Synthesis	9
DES 302: Design Studio IV: Vancouver Studio	9
DES 323: Histories in Landscape Architecture	3
DES 421: Design Theory	3
DES 330: Structural Systems and Supports	3
Electives	9
<b>Year 3 – Summer</b>	
DES 341: Co-operative Education I	(6)
<b>Year 4 – Term 1 and 2</b>	
DES 442: Co-operative Education II	(6)
DES 443: Co-operative Education III	(6)
<b>Year 5 – 36 cr</b>	
DES 401: Design Studio V – Urban Systems Scale Synthesis	9
DES 403: Senior Design Project	9
DES 421: Urbanism by Design	3
DES 430: Environment, Urban Form and Infrastructure	3
DES 445: Entrepreneurship and Ethics in Design	3
DES 450: Special Topics	3
Electives	6
<b>TOTAL CREDITS</b>	<b>133</b>

[illegible]

### 3.5.3. Outline of Program for a Transfer Student

<b>Year 1 – 31 cr</b>	<b>Credits</b>
DES 230: Sustainability by Design	3
DES 110: Measured Architectural Drafting	3
Reading Course	3
Writing Course	3
Geography Course	3
Electives	15
<b>Year 2 – 30 cr</b>	
DES 101: Introductory Workshop	1
DES 200: Design Thinking	3
DES 201: Design Studio I - Context and Site	6
DES 202: Design Studio II – Form	6
DES 211 Design Media I	3
DES 212: Design Media II	3
DES 321: Architectural History I	3
DES 231: Site Analysis and Planning	3
DES 232: Material Culture	3
<b>Year 3 – 36 cr</b>	
DES 301: Design Studio III - Building Scale Synthesis	9
DES 302: Design Studio IV: Vancouver Studio <b>or</b> Coordinated International Exchange (CIE)	9
DES 323: Histories in Landscape Architecture	3
DES 421: Design Theory	3
DES 330: Structural Systems and Supports	3
DES 350: Design Build Elective	3
Electives	9
<b>Year 4 – 36 cr</b>	
DES 401: Design Studio V – Urban Systems Scale Synthesis	9
DES 402: Design Studio VI – Away Studio	9
DES 421: Urbanism by Design	3
DES 430: Environment, Urban Form and Infrastructure	3
DES 445: Entrepreneurship and Ethics in Design	3
DES 450: Special Topics	3
Electives	3
<b>TOTAL CREDITS</b>	<b>133</b>



**8.D.1c. TYPICAL STUDY PLAN - Transfer Student**

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### **3.6 Honours Option**

The B.Des. curriculum is a demanding one, requiring 133 credits of coursework to complete the degree, with a load of 18 credits a semester in the 3<sup>rd</sup> and 4<sup>th</sup> year of study.

The B.Des. program offers an Honours Option to students who demonstrate high academic performance throughout their study. At the end of their third year, students can apply to the Honours Option. Entry requires that students have achieved a sessional average of 80% in coursework from Year 2 and Year 3, and a grade of 80% or better in each of DES 201, 202, 301 and 302. Students who qualify are invited to complete DES 403, a Senior Design Project that is self-directed. Graduation with Honours requires that students achieve a grade of 80% or higher in both DES 401 and DES 403.

### **3.7. Development and Support of First-Year Cohort**

A maximum of 20 seats will be filled by the first-year cohort of the B.Des. degree. Because the first year foundational courses are not comprised of only B.Des. students, the ability of supporting of the development of the cohort of first-years as a learning community is a concern in the design of the curriculum. It is the intent that conscious social and administrative support will assist the first-years in their transition from secondary school and in their ability to form a cohort:

- The one week Introductory Workshop at the beginning of the year is a required course for every incoming B.Des., M.Arch. and M.L.A. student in SALA. During the Introductory Workshop, the respective design programs have program-only sessions in which students are able to meet their classmates, have information sessions, and socialize.
- In the first year of study, B.Des. students will likely enrol in 6-8 of the same courses, and have slots for 3-5 courses they do not necessary take with their cohort. In the B.Des courses that have tutorial sections, B.Des students will be grouped together. For the courses that the students are not required to take with their cohort, a list of recommended electives will be given to students that will direct them towards courses relevant to the foundation of a design education. Doing so will also encourage the students to take more courses together as a group.
- The B.Des. Program Chair will host a monthly lunchtime seminar with first-year B.Des. students. The monthly meeting will give the students an opportunity to exchange ideas, reflect on their courses, and hear presentations by faculty, students or guests.

- The SALA student groups host a weekly social event on Friday nights throughout the terms in which they share their work with each other and socialize over drinks and food. The first-year cohort of students will be invited to this weekly event.
- Finally it is intended that lockers will be provided for B.Des. students on campus. Space and budget permitting, the lockers will be located adjacent to a small social space for the students to take a break, make tea or coffee, and heat up food. The ability for the students to “land” on campus in a social space will be an important way to offer them a space through which they can get to know each other and share their experiences.

### **3.8. Second-year Transfer Students**

The remaining balance of seats will be filled by second-year transfer students (to make a total cohort of 30 students). This number may fluctuate from 10 to 13+ depending on attrition from the group that entered as first-year students. This large side door is maintained for the B.Des. program in order to keep the program porous to students who were not aware of the B.Des. program prior to their arrival at UBC, students from other design programs in Canada and beyond who learn about the B.Des. program and prefer the unique curriculum, and students from other post-secondary institutions who learn about the program in their first year(s) of study.

### **3.9. First Year Exit**

Students who do not successfully complete the first year of the B.Des. program or who choose not to continue in the program may apply to other UBC programs through the standard transfer application process. The first-year B.Des. curriculum is highly transferrable to the B.A. program and, depending on their performance in the first year of the B.Des. program, students may be qualified to transfer in to second year of the B.A. program.

## **4. Demand for Program**

### **4.1. Enrolment Predictions and Capacity**

As has already been stated in the Program Change Rationale Background section or 2.1, there is a high level of interest for the B.En.D. program that we believe will transfer and perhaps increase with the B.Des. program. The interest in our open house for prospective students as well as the enrolment levels in the 200-level open survey course that are offered to the UBC student community, indicate that there is a demand for an undergraduate degree in design that is currently not being met. Finally, the program currently has space for one of three eligible applicants. Due to space restrictions and because of the intensive studio teaching model, the B.Des. program will keep the class size of 30 students but double the size of the student body by offering first-year entry, and thus have students taking courses in a 4-year program of study. When more space opens up, the program will expand to 45 students a year.

#### **4.2. Potential Sectors of Employment for Graduates**

Graduates of the B.Des. program will have a non-professional degree in Design. We expect that the majority of the graduates will go on to pursue graduate degrees in Architecture, Landscape Architecture, and Urbanism. As a benchmark, two-thirds of our current graduates from the B.En.D. degree pursue Master's level degrees. The remaining approximate one-third of our graduates pursue careers in allied design professions such as fashion design, film and game design, and communication design. Several have started their own firms and pursue a broad range of design work. With the more robust education in Design offered through the B.Des. degree, we expect that our future graduates will follow similar education and career pathways.

#### **5. Calendar Statement**

See Appendix C

## **6. Program Resources**

### **6.1. Program Budget**

The Program Budget is not included for academic consultation. The B.Des. degree will be self-funding.

Discussions are underway with representatives in the Provost's office and the Faculty of Applied Science to investigate tuition rates. With greater revenue we will be in a position to add a junior faculty position, seek out contiguous and more appropriate studio space, and offer better teaching and administrative support to the program.

### **6.2. Qualified Faculty**

The B.Des. program is currently taught by full-time faculty from both the Architecture and the Landscape Architecture programs within SALA. A small cohort of adjuncts also teach in the program. Both full-time faculty and adjuncts are supported by graduate students from the M.Arch and M.L.A. programs in the form of Graduate Teaching Assistants (G.T.A.s). See Appendix E for further information on faculty.

### **6.3. Library Resources**

The expanded B.Des. program will not necessitate a major commitment to new acquisitions, as key design journals and a considerable collection of design books are currently available in the Music, Art and Architecture Library in the I.K. Barber Learning Centre and in SALA's Reading Room in Lasserre. See Appendix F for library consultations

### **6.4. Administration**

- Bachelor of Design Program Chair (1.0 FTE – already in place)

The current B.En.D. program is led by a Program Chair. The Chair is responsible for leading the ad hoc committee that envisioned the new B.Des. program. In addition, the Chair attends to the day-to-day academic operations of the program, including managing the faculty and adjuncts teaching within the program and addressing student needs and concerns. The Chair assumes teaching and research commitments and represents B.En.D. on SALA committees. The Program Chair of the new B.Des. program will assume the same responsibilities as the current B.En.D. Program Chair.

- Bachelor of Design Program Coordinator (0.5 FTE to 1.0 FTE)

The current B.En.D. program has 0.5 administrator support. The Program Coordinator assists with: student recruitment, student enquiries, website development and maintenance, community outreach coordination, course evaluation and event planning. With an increased number of students entering the new B.Des. program, the projected budget makes provision for a 0.5 FTE increase in 2018.

- Bachelor of Design Student Development Coordinator (0.5 FTE)

The current B.En.D. program has limited support for student development. With the development of the Co-operative Education Program, the Coordinated International Experience, and other opportunities pertaining to student development, the program will benefit from administrative support to launch and run these programs. The Student Development Coordinator will work closely with the Applied Science Professional Development Office.

### **6.5. Space Requirements**

The expanded B.Des. curriculum and student numbers will require more space than the program currently occupies. The B.Des. Chair has met with members of the UBC Infrastructure Development – Capital Planning -- to explain the program's space needs in the coming years. Members of the Infrastructure Development team are in the process of finding solutions to the program's future space needs.

### **6.6. Contact Information**

B.Des. Program Office  
402 - 6333 Memorial Road  
Vancouver BC V6T 1Z2  
Tel: 604.822.0205  
Email: [tjuba@sala.ubc.ca](mailto:tjuba@sala.ubc.ca)  
Web: [www.sala.ubc.ca](http://www.sala.ubc.ca)  
Theresa Juba, Academic Coordinator

The University of British Columbia

Faculty of Applied Science

School of Architecture and Landscape Architecture

Program Change Proposal

**Bachelor of Design in Architecture, Landscape Architecture and Urbanism**

**B.Des.**

## **Appendix A**

New Program Degree Name, Degree Credential and Course Code

**November 01, 2016**

**REVISED January 25, 2017**

**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1) - New Program Name and Degree Credential**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 25 January 2017 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<b><u>Proposed Program Degree Name and Credential:</u></b>  <b>Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism</b>	<b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,4,8,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,4,8,0</a>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,196,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,196,0,0</a>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,196,277,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,196,277,0</a>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,266,772,0#17993">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,266,772,0#17993</a>  <b><u>Current Calendar Entry</u></b> There is no current calendar entry for the proposed program. The URL listings above suggest where an entry would be required.  <b><u>Action:</u></b> Create new degree program and credential and add to the pages as noted above.  <b><u>Rationale:</u></b>  The proposed degree name and credential is the Bachelor of Design (B.Des.) in Architecture, Landscape Architecture, and Urbanism. The degree will be a Bachelor's degree in Design with a focus on Architecture, Landscape Architecture and Urbanism. Additional curriculum will address the history and theory of design, technological aspects of design, media related to design, and the professional



	practice of design.
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**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: (1) - New Program Code**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<b><u>Proposed Course Code:</u></b>  <b>DES</b>	<b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name</a>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code</a>  <b><u>Action:</u></b> Create new program code and add to the pages as noted above.  <b><u>Rationale:</u></b>  The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urbanism.  The course code of DES is intuitive to the Bachelor of Design. and identifies courses that arise out of the B.Des.

The University of British Columbia

Faculty of Applied Science

School of Architecture and Landscape Architecture

Program Change Proposal

**Bachelor of Design in Architecture, Landscape Architecture and Urbanism**

**B.Des.**

## **Appendix B**

New and Modified Course Proposals

**November 01, 2016**

**REVISED January 25, 2017**

## New Courses (Category 1)

DES 201 (6) Design Studio I – Context and Site  
DES 202 (6) Design Studio II - Form  
DES 301 (9) Design Studio III – Building Scale Synthesis  
DES 302 (9) Design Studio IV – Vancouver  
DES 402 (9) Design Studio VI – Away  
DES 403 (9) Senior Design Project  
DES 323 (3) Histories in Landscape Architecture  
DES 330 (3) Structural Systems and Supports  
DES 350 (3) Design Build  
DES 422 (3) Urbanism by Design  
DES 445 (3) Entrepreneurship and Ethics in Design  
DES 341 (6) Co-operative Education I  
DES 442 (6) Co-operative Education II  
DES 443 (6) Co-operative Education III  
DES 444 (6) Co-operative Education IV

\*January 25, 2017 Revision

\*January 25, 2017 Revision

## Modified Courses (Category 2)

DES 101 (1) Introductory Workshop  
DES 110 (3) Measured Architectural Drafting  
DES 200 (3) Design Thinking  
DES 211 (3) Design Media I  
DES 212 (3) Design Media II  
DES 220 (3) Architecture in Context: Vancouver and its Region  
DES 230 (3) Sustainability by Design  
DES 231 (3) Site Analysis and Planning  
DES 232 (3) Material Culture  
DES 321 (3) Architectural History I  
DES 322 (3) Architectural History II  
DES 401 (9) Design Studio V - Urban Systems Scale Synthesis  
DES 421 (3) Design Theory  
DES 430 (3) Environment, Urban Form and Infrastructure  
DES 450 (1-9) d Special Topics

**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 201 (6) Design Studio I – Context and Site</b></p> <p>Design within the context of various analytical lenses including ecological, climatic, social, political, cultural and historical influences. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b>Pre-requisite: DES 110 or VISA 281</b></p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b><u>Type of Action:</u></b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>This core course is included in the 91 credits of required core courses.</p> <p>Core Design Studio course I. Essential skills are developed for the successful application in subsequent studios.</p> <p>The design studio will focus on creating projects within real-life sites and contexts in order to examine how design may influence and be influenced by its setting. The assignments will also examine how we define and research a site to include a number of analytical lenses including: ecological, climatic, social, political, cultural, temporal and historical influences that can play a significant role in the development of ideas.</p> <p><b>X      Not available for Cr/D/F Grading</b></p>

	<p><b>(undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b></p> <p>DES 201 is restricted to B.Des., B.En.D. students.</p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<b><u>Proposed Calendar Entry:</u></b>  <b>DES 202 (6) Design Studio II - Form</b>  <b>Essential processes and methods for thinking in three-dimensional spatial terms. <i>This course is not eligible for Credit/D/Fail grading.</i></b>  <b>Pre-requisite: a grade of 60% or better in DES 201</b>	<b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a>  <b><u>Present Calendar Entry:</u></b> N/A  <b><u>Type of Action:</u></b> Add new course  <b><u>Rationale for Proposed Change:</u></b>  The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.  This core course is included in the 91 credits of required core courses.  Core Design Studio course II. Essential skills are developed for the successful application in subsequent studios.  The studio is an introduction to the essential processes and methods for thinking in three dimensional spatial terms. The studio will focus on ways to create relationships between the volumes of the built environment with human experience and how those ideas can be expressed. The goal in these exercises is to give the students a foundational experience in creating space in order to equip them for more topic-based subsequent design studios.

	<p>Emphasis will be placed on 2D and 3D explorations in drawings and physical modeling.</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b></p> <p>DES 202 is restricted to B.Des., B.En.D. students.</p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 301 (9) Design Studio III – Building Scale Synthesis</b></p> <p><b>Design at the architectural scale through the medium of program and site. <i>This course is not eligible for Credit/D/Fail grading.</i></b></p> <p><b><i>Pre-requisite: a grade of 60% or better in DES 202</i></b></p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a> </p> <p><b><u>Present Calendar Entry:</u></b>          N/A       </p> <p><b><u>Type of Action:</u></b>          Add new course       </p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.           This core course is included in the 91 credits of required core courses.           Core Design Studio course III. Essential skills are developed for the successful application in subsequent studios.           This studio will focus on designing at the architectural scale through the medium of simple programs and sites. The goal in these exercises is to give the students an experience in synthesizing the previous 2 studios of work, integrating their experience of site analysis, with more formal relationships of built form, programmatic relationships, preliminary structural ideas and material deployment. This studio setting will encourage the students to examine how the experience of inhabitants can be facilitated through the making of       </p>

	<p>supportive and inspiring environments, through precedent research and their own design projects. Emphasis will be placed on 2D explorations in computer and hand drawing combined with 3D studies in physical modeling.</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/Fail</u></b></p> <p>DES 301 is restricted to B.Des., B.En.D. students.</p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 302 (9) Design Studio IV – Vancouver</b></p> <p><b>Vancouver as a laboratory for design at the architectural and urban scale with a focused view into how design is implicated in the social, political, and environmental transformation of the city. <i>This course is not eligible for Credit/D/Fail grading.</i></b></p> <p><b><i>Pre-requisite: a grade of 60% or better in DES 301</i></b></p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a> </p> <p><b><u>Present Calendar Entry:</u></b>          N/A       </p> <p><b><u>Type of Action:</u></b>          Add new course       </p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.           This core course is included in the 91 credits of required core courses.           Core Design Studio course IV. Essential skills are developed for the successful application in subsequent studios.          This studio will use the Vancouver region as a laboratory. A design project framed around a real client will offer a focused view into how design is implicated in the social, political, and environmental transformation of the city. Clients will be academic entities, non-profit societies, and governmental agencies such as the City of Vancouver or the Vancouver Parks Board. The range of scales explored in the studio will bring the architectural, landscape architectural and urban scales together.       </p> <p><b>X      Not available for Cr/D/F grading</b></p>

UBC Curriculum Proposal Form  
Change to Course or Program

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 24 January 2017 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>DES 402 (9) Design Studio VI - Away</b>  A design project engaged with an international context and site. Emphasis placed on mapping, interpretation of the international context as well as methods of construction, notions of program, and policies, regulations and codes that relate to the site. <i>This course is not eligible for Credit/D/Fail grading.</i>  <b>Pre-requisite:</b> a grade of 60% or better in DES 401.	<b>URL:</b> DES 402  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Add new course  <b>Rationale for Proposed Change:</b>  Students not enrolled in the Honours Option will enroll in DES 402, a class-based studio with an international context, as the final studio for the B.Des. degree, synthesizing all aspects of the design education within the degree.  <b>X      Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F</b>  Restricted to B.En.D, B.Des.. students.  <input type="checkbox"/> <b>Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail</b> <b>grading</b>

**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 24 January 2017 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>DES 403 (9) Senior Design Project</b>  <b>Final design project in the Honours Option with an independently conceived methodology allowing a student the opportunity to pursue his/her own set of interests and concerns. <i>This course is not eligible for Credit/D/Fail grading.</i></b>  <b>Pre-requisite: a grade of 80% or better in DES 401.</b>	<b>URL:</b> DES 403  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Add new course  <b>Rationale for Proposed Change:</b>  Students admitted to the Honours Option who have achieved a grade of 80% or better in DES 401 will undertake DES 403, Senior Design Project, an independent design project allowing the student to self-direct the project at the same time synthesizing all aspects of the design education within the degree.  <b>X      Not available for Cr/D/F grading (undergraduate courses only)</b>  <b>Rationale for not being available for Cr/D/F</b>  Restricted to B.Des. students.  <input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading

**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 323 (3) Histories in Landscape Architecture</b></p> <p>Landscapes from medieval times to the present studied synchronically across design elements as well as chronologically with the development of several key historical concepts. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b><u>Type of Action:</u></b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>This course is one of the history + theory stream requirements.</p> <p>This course examines landscapes from medieval times to the present. These works will be studied synchronically across design elements as well as chronologically with the development of several key historical concepts. These concepts include the relationship between landscapes and constructs of nature, power, gender and race, and competing ideas within modernism and postmodernism. The goal of the course is to introduce students to landscape architecture in an historical context.</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p>

	<b><u>Rationale for not being available for Cr/D/F</u></b> DES 323 is restricted to B.Des., B.En.D. students.
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 330 (3) Structural Systems and Supports</b></p> <p>Basic structural systems in the built world including wood, steel, concrete, composite systems and essential structural logics of soil retention systems and drainage. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b>Pre-requisites:</b> DES 231 and 232</p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b>Type of Action:</b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>This core course is included in the 91 credits of required core courses.</p> <p>Core course.</p> <p>This course is a preliminary primer for the understanding of basic structural systems in the built world. The course reviews the basic systems of wood, steel, concrete, and composites systems (architecture) and also the essential structural logics of soils retention systems and drainage (landscape architecture). The goal of the course is to develop a curiosity within the students to investigate the ways within which we build while emphasizing the basic physics and aesthetics of choosing to work with various systems.</p>



	<p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b></p> <p>DES 330 is restricted to B.Des., B.En.D. students</p>
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**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 350 (3) Design Build</b></p> <p>Direct hands-on confrontation with the realities of design and construction, engaging in both conventional and unconventional building processes. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b>Pre-requisite:</b> DES 302</p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b><u>Type of Action:</u></b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>This course is an introduction to direct, hands-on confrontation with the realities of design and construction. The goal of the course is to extend the design process through to the end of a construction phase and to develop a curiosity within the students to investigate the ways within which we build. The course will engage in both conventional and unconventional building processes.</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/Fail</u></b>          DES 350 is restricted to SALA students.</p>

**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 422 (3) Urbanism by Design</b>          A history of the planning, landscape architecture and urban design of cities, and of how ideas have influenced the design of the city. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b><u>Pre-requisites:</u></b> 2 of DES 321, 322, 323</p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b><u>Type of Action:</u></b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>This core course is included in the 91 credits of required core courses.</p> <p>Core course.</p> <p>This course provides an interactive and experiential learning environment intended to animate and make accessible the major threads in the history and theory of urban design. Students interpreting the built environment through case studies using theoretical and historical lenses collaboratively developed with fellow students. This is a seminar and lecture style course in which students refine their capacity for informed and engaging discourse on historically grounded and theoretically analyzed contemporary urban design projects. Students explore multiple opportunities to improve their verbal</p>

	<p>and written communication.</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/Fail</u></b></p> <p>DES 422 is restricted to B.Des., B.En.D. students.</p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 445 (3) Entrepreneurship and Ethics in Design</b></p> <p><b>Core business skills, building on students' design capabilities to pursue ethical and sustainable design-based business goals. This course is not eligible for Credit/D/Fail grading.</b></p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b><u>Type of Action:</u></b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>This core course is included in the 91 credits of required core courses.</p> <p>Core course.</p> <p>The skills required to be a designer (vision, problem solving, process, etc.) are also those required to become a successful entrepreneur. By adding a few key business skills to their repertoire, designers are ideally positioned to drive innovative businesses. This course is intended to provide students with both the skills and also the inspiration to turn ideas into viable startups. Furthermore, the course will engage in the particular challenges and opportunities of pursuing ethical and sustainable business goals.</p> <p><b>X      Not available for Cr/D/F grading</b></p>

	<p><b>(undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/Fail</u></b></p> <p>DES 445 is restricted to SALA students.</p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 341 (6) Co-operative Education I</b></p> <p><b>Supervised, technical work experience in an established company or organization for a minimum of three months. Experiential Report required. Restricted to students meeting the requirements of the Bachelor of Design and the Co-operative Education Program. This course is not eligible for Credit/D/Fail grading.</b></p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b><u>Type of Action:</u></b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>The Co-operative Education Program is an optional program for students wishing to learn about the design industry and have direct and embedded experiences within the industry.</p> <p>Students who successfully complete a minimum of three (3) terms of the Co-operative Education Program will have completed the requirements for the B.Des. Co-operative Education Program option and will have 'Co-operative Education Program' noted on the academic transcript as well as the degree parchment.</p> <p>In the first work term, students are to complete an Experiential Report. The objective of the Experiential Report is to encourage students to reflect on their work experience and how it relates to their academic and career development. Good written</p>

	<p>communication skills are vital to success in the design profession. Writing the report will help students develop writing abilities that are precise and reflective. The report will also assist in the instigation of research on the students' design firm and its structure.</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b></p> <p>DES 341 is restricted to B.Des. students.</p> <p><b>X Pass/Fail or    <input type="checkbox"/> Honours/Pass/Fail grading</b></p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 442 (6) Co-operative Education II</b></p> <p><b>Supervised, technical work experience in an established company or organization for a minimum of three months. Career Development Report required. Restricted to students meeting the requirements of the Bachelor of Design and the Co-operative Education Program. <i>This course is not eligible for Credit/D/Fail grading.</i></b></p> <p><b><u>Pre-requisite:</u> DES 441</b></p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b><u>Type of Action:</u></b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>The Co-operative Education Program is an optional program for students wishing to learn about the design industry and have direct and embedded experiences within the industry.</p> <p>Students who successfully complete a minimum of three (3) terms of Co-operative Education will have completed the requirements for the B.Des. Co-operative Education Program option and will have 'Co-operative Education Program' noted on the academic transcript as well as the degree parchment.</p> <p>In the second work term, students are to complete a Career Development Report. The objective of the Career Development Report is to stimulate students to project themselves into their future careers in design. Students will conduct research on the field and research</p>

	<p>the marketplace and the job opportunities that exist within the various areas of design.</p> <p>The report has two main sections: the area in the field of design where the student is currently employed, and another area in the field of design where the student is interested in seeking employment in the future.</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b></p> <p>DES 442 is restricted to B.Des. students.</p> <p><b>X Pass/Fail or    <input type="checkbox"/> Honours/Pass/Fail grading</b></p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 443 (6) Co-operative Education III</b></p> <p>Supervised, technical work experience in an established company or organization for a minimum of three months. Oral Presentation required. Restricted to students meeting the requirements of the Bachelor of Design and the Co-operative Education Program. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b><u>Pre-requisite:</u></b> DES 442</p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b><u>Type of Action:</u></b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>The Co-operative Education Program is an optional program for students wishing to learn about the design industry and have direct and embedded experiences within the industry.</p> <p>Students who successfully complete a minimum of three (3) terms of Co-operative Education will have completed the requirements for the B.Des. Co-operative Program option and will have 'Co-operative Education Program' noted on the academic transcript as well as the degree parchment.</p> <p>In the third work term, students are to create an Oral Presentation of a project they worked on during the work term.</p> <p>The objective of the Oral Presentation is gain experience making a formal presentation regarding a professional design project. Good</p>

	<p>oral communication and presentation skills are vital to success in the design profession. Working with the professional mentor, a project that the student is actively working on in the Co-op Term is to become the subject of the Presentation. Students are encouraged to (with their professional mentor's permission) keep a log of the tasks and kinds of work they are asked to do on projects, take detailed notes in meetings, and arrange conversations with other employees in the firm to learn about their respective jobs on the project. The information gathered through these notes and interviews should inform the contents of the Oral Presentation.</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b></p> <p>DES 443 is restricted to B.Des. students.</p> <p><b>X Pass/Fail or      <input type="checkbox"/> Honours/Pass/Fail grading</b></p>
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**UBC Curriculum Proposal Form**  
**Change to Course or Program**

**Category: (1)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 444 (6) Co-operative Education IV</b></p> <p>Supervised, technical work experience in an established company or organization for a minimum of three months. Oral Presentation required. Restricted to students meeting the requirements of the Bachelor of Design and the Co-operative Education Program. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b>Pre-requisite:</b> DES 443</p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=DES</a></p> <p><b><u>Present Calendar Entry:</u></b>          N/A</p> <p><b><u>Type of Action:</u></b>          Add new course</p> <p><b><u>Rationale for Proposed Change:</u></b>          The Bachelor of Design (B.Des.) in Architecture, Landscape Architecture and Urbanism honours degree program offers undergraduate design education in Architecture, Landscape Architecture and Urban Design.</p> <p>The Co-operative Education Program is an optional program for students wishing to learn about the design industry and have direct and embedded experiences within the industry.</p> <p>Students who successfully complete a minimum of three (3) terms of Co-operative Education will have completed the requirements for the B.Des. Co-operative Program option and will have 'Co-operative Education Program' noted on the academic transcript as well as the degree parchment.</p> <p>In the fourth work term, students are to create an Oral Presentation of a project they worked on during the work term. This is the second Oral Presentation a B.Des Co-op Student is to make.</p> <p>The objective of the Oral Presentation is gain</p>

	<p>experience making a formal presentation regarding a professional design project. Good oral communication and presentation skills are vital to success in the design profession. Working with the professional mentor, a project that the student is actively working on in the Co-op Term is to become the subject of the Presentation. Students are encouraged to (with their professional mentor's permission) keep a log of the tasks and kinds of work they are asked to do on projects, take detailed notes in meetings, and arrange conversations with other employees in the firm to learn about their respective jobs on the project.</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b></p> <p>DES 444 is restricted to B.Des. students.</p> <p><b>X Pass/Fail or    <input type="checkbox"/> Honours/Pass/Fail grading</b></p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (2)**

<b>Faculty:</b> Applied Science <b>Department:</b> School of Architecture and Landscape Architecture <b>Faculty Approval Date:</b> 3 March 2016 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2018	<b>Date:</b> 18 October 2016 <b>Contact Person:</b> Theresa Juba, Academic Coordinator <b>Phone:</b> 604 822-0205 <b>Email:</b> tjuba@sala.ubc.ca
<b><u>Proposed Calendar Entry:</u></b>  <b>DES</b> 101: (1) Introductory Workshop  Week long orientation to the School community, the City and the study of design one week prior to the start of Winter Session Term 1. <b>Credit will be granted for only one of ENDS 101 or DES 101.</b>	<b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=END">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=END</a>  <b><u>Present Calendar Entry:</u></b>  <del>ENDS</del> 101: (1) Introductory Workshop Week long orientation to the School community, the City and the study of design one week prior to the start of Winter Session Term 1.  <b><u>Type of Action:</u></b> . change course code . add credit exclusion statement  <b><u>Rationale:</u></b> Aligns course code with B.Des. curriculum.  <b>X      Not available for Cr/D/F grading (undergraduate courses only)</b>  <b><u>Rationale for not being available for Cr/D/F</u></b> DES 101 is restricted to B.Des., B.En.D. students  <b>X Pass/Fail or      <input type="checkbox"/> Honours/Pass/Fail grading</b>
<b><u>Proposed Calendar Entry:</u></b>  <b>DES</b> 110 (3) Measured Architectural <b>Drawing</b>  An introduction to a range of techniques applicable to analytic and technical drawing used in architecture, landscape architecture	<b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=ENDS">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=ENDS</a>  <b><u>Present Calendar Entry:</u></b> <del>ENDS</del> 110 (3) Measured Architectural <del>Drafting</del> An introduction to a range of techniques

<p>and urban design with focus primarily on analog drawing techniques. <b>Open to all UBC students regardless of prior experience. Credit will be granted for only one of ENDS 110 or DES 110.</b></p>	<p>applicable to analytic and technical drawing used in architecture, landscape architecture and urban design with focus primarily on analog drawing techniques.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>. change course code to DES</li> <li>. add credit exclusion statement</li> <li>. change 'drafting' to 'drawing in title</li> </ul> <p><b>Rationale:</b></p> <ul style="list-style-type: none"> <li>. aligns course code with B.Des. curriculum.</li> <li>. content is more appropriately described as drawing</li> </ul> <p>DES 110 is available for Credit/D/Fail.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>DES 200 (3) Design Thinking</b></p> <p>Design thinking through the analysis of architecture, landscape architecture and urban design and <b>through</b> hands-on design projects. <b>This course is open to all UBC students, regardless of prior experience. Credit will be granted for only one of ENDS 231 or DES 200. This course is not eligible for Credit/D/Fail grading.</b></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=ENDS">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=ENDS</a></p> <p><b>Present Calendar Entry:</b>  <b>ENDS 231 (3) Thinking by Design</b>  <del>Introduction to</del> design thinking through the analysis of architecture, landscape architecture, urban design, and hands-on design projects. <i>This course is not eligible for Credit/D/Fail grading. {1.5-2.5-0}</i></p> <p><b>Type of Action:</b></p> <ul style="list-style-type: none"> <li>. change course code and number</li> <li>. modify course name and description</li> <li>. remove vectors</li> <li>. add credit exclusion statement</li> </ul> <p><b>Rationale for Proposed Change:</b></p> <ul style="list-style-type: none"> <li>. course code and number change align with B.Des. curriculum</li> <li>. course title and description modified for clarity</li> <li>. vectors removed in consistency with all DES course offerings</li> </ul> <p><b>X Not available for Cr/D/F grading</b></p>



	<p align="center"><b>(undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b></p> <p>DES 200 has a lecture and a studio lab component with the studio lab component consisting of individual student design work presentations and critiques of those designs. A student taking DES 200 for credit/d/fail may have a detrimental impact on classmates and TA in the lab section.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 211</b> (3) Design Media I</p> <p>Techniques in architectural drawing, two-dimensional representation, three-dimensional representation and general visual literacy. <b>Credit will be granted for only one of ENDS 320, ARCH 515 or DES 211. This course is not eligible for Credit/D/Fail grading.</b></p> <p><b>Pre-requisite:</b> DES 110 or VISA 180</p>	<p><b><u>URL:</u></b></p> <p><a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS</a></p> <p><b><u>Present Calendar Entry:</u></b></p> <p><del>ENDS 320</del> (3) Design, Media <del>and Representation</del>  <del>Theories, histories and techniques of design representation; geometry, design and expression are principle areas of focus.</del></p> <p><b><u>Type of Action:</u></b></p> <ul style="list-style-type: none"> <li>. change course code and number</li> <li>. modify course name and description</li> <li>. add credit exclusion statement</li> </ul> <p><b><u>Rationale for Proposed Change:</u></b></p> <ul style="list-style-type: none"> <li>. course code and number change align with B.Des. curriculum</li> <li>. course title and description modified to more clearly describe what the course covers in order to distinguish it from other Design Media courses ie. DES 110 and DES 212.</li> <li>. students will now take this course in the second year of study (not their third year as it is currently), so the course code has been switched to a 200-level course for better alignment with the B.Des. curriculum. The course content is the same. Because the students will have taken a pre-requisite for this course, they will be prepared for the course material.</li> </ul> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p>

	<p><b><u>Rationale for not being available for Cr/D/F</u></b> DES 211 is restricted to B.Des., B.En.D. students.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 212 (3) Design Media II</b></p> <p>Advanced techniques in architectural representation and discourse in digital representation and digital making. <b>Credit will be granted for only one of ARCH 437, ARCH 517 or DES 212.</b> <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b>Pre-requisite: DES 211</b></p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ARCH">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ARCH</a> <a href="#">H</a></p> <p><b><u>Present Calendar Entry:</u></b> <del>ARCH 437 (3) Geometric Modeling</del> <del>Advanced modeling, rendering and image processing applications; the construction of geometric models, their viewing transformations, light and material attributes; mapping and rendering are introduced. Restricted to B.En.D. students. This course is not eligible for Credit/D/Fail grading.</del></p> <p><b><u>Type of Action:</u></b></p> <ul style="list-style-type: none"> <li>. change course code and number</li> <li>. modify course name and description</li> <li>. add credit exclusion statement</li> </ul> <p><b><u>Rationale for Proposed Change:</u></b></p> <ul style="list-style-type: none"> <li>. course title and description modified to more clearly describe what the course covers in order to distinguish it from other Design Media courses ie. DES 110 and DES 211.</li> <li>. students will now take this course in the second year of study (not their third year as it is currently), so the course code has been switched to a 200-level course in order to better align with the B.Des. curriculum. The course content is the same. Because the students will have taken DES 110 or VISA 180 and DES 211 before this course, they will be prepared for the course material.</li> </ul> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b> DES 212 is restricted to B.Des., B.En.D. students.</p>

<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 220</b> (3) Architecture in Context: Vancouver <b>and its Region</b> An exploration of the unfolding architecture and urbanism of Metro Vancouver. Using Vancouver as a laboratory, the course examines the historical transformation of the built environment, and how this has affected particular activities, land uses, and social groups within the region. <b>This course is open to all UBC students, regardless of prior experience. Credit will be granted for only one of ENDS 220 or DES 220.</b></p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=ENDS">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=ENDS</a></p> <p><b><u>Present Calendar Entry:</u></b> <del>ENDS</del> 220 (3) Architecture in Context: Vancouver An exploration of the unfolding architecture and urbanism of Metro Vancouver. Using Vancouver as a laboratory, the course examines the historical transformation of the built environment, and how this has affected particular activities, land uses, and social groups within the region.</p> <p><b><u>Type of Action:</u></b></p> <ul style="list-style-type: none"> <li>. change course code</li> <li>. expand course title</li> <li>. indicate course is open to all UBC students</li> <li>. add credit exclusion statement</li> </ul> <p><b><u>Rationale:</u></b></p> <ul style="list-style-type: none"> <li>. course code change aligns course with B.Des. curriculum</li> <li>. course title expanded for clarification</li> </ul> <p>DES 220 is available for Credit/D/Fail</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 230</b> (3) Sustainability by Design Introduction to interactions between human and natural urban systems using local and international examples of successful sustainable community designs. <b>This course is open to all UBC students, regardless of prior experience. Credit will be granted for only one of ENDS 221 or DES 230.</b> <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS</a></p> <p><b><u>Present Calendar Entry:</u></b> <del>ENDS 221</del> (3) Sustainability by Design Introduction to interactions between human and natural urban systems using local and international examples of successful sustainable community designs. <i>This course is not eligible for Credit/D/Fail grading. {3-0-1}</i></p> <p><b><u>Type of Action:</u></b></p> <ul style="list-style-type: none"> <li>. change course code and number</li> <li>. remove vectors</li> <li>. add open to all UBC students statement</li> <li>. add credit exclusion</li> </ul>

	<p><b><u>Rationale for Proposed Change:</u></b></p> <ul style="list-style-type: none"> <li>. course code and number change align with B.Des. curriculum</li> <li>. course title and description modified for clarity</li> <li>. vectors removed in consistency with all DES course offerings</li> </ul> <p><b>X        Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b> DES 230's final assignment is a group assignment. A student taking a DES 230 for Credit/D/Fail may have a detrimental impact on their peers in that group.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 231 (3) Site Analysis and Planning</b> Analysis and planning of relatively complex sites, emphasizing storm water management design. Credit will be granted for only one of LARC 440, LARC 540 or <b>DES 231. This course is not eligible for Credit/D/Fail grading.</b></p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=LARC">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=LARC</a></p> <p><b><u>Present Calendar Entry:</u></b></p> <p><del>LARC 440 (3) Site Analysis and Planning II</del> <del>Site analysis and planning of relatively complex sites, emphasizing storm water management design.</del> <del>Open only to B.En.D. students.</del> Credit will be given for only one of LARC 440, LARC 540.</p> <p><b><u>Type of Action:</u></b></p> <ul style="list-style-type: none"> <li>. change course code and number</li> <li>. remove 'II' from course title</li> <li>. amend credit exclusion statement</li> </ul> <p><b><u>Rationale for Proposed Change:</u></b></p> <ul style="list-style-type: none"> <li>. course code and number change align with B.Des. curriculum</li> <li>. there is not Site Analysis and Planning II – this was an error</li> <li>. assign a course # and level that aligns with the course content; the course has been taught as a entry-level foundational course in the B.En.D. program for several years and is therefore more appropriate as a 200-level</li> </ul>

	<p>course.</p> <p><b>X Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b> DES 231 is restricted to B.Des., B.En.D. students.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 232</b> (3) Material <b>Culture</b></p> <p>An investigation of building materials and <b>associated</b> design objectives, environmental conditions, historical context, regulatory controls, and economic constraints.</p> <p><b>Credit will be granted for only one of ARCH 411 or DES 232.</b> <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=ARCH">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=ARCH</a></p> <p><b><u>Present Calendar Entry:</u></b></p> <p><del>ARCH 411</del> (3) Materials <del>and Methods of Construction</del></p> <p>An investigation of building materials and <del>systems-considering</del> design objectives, environmental conditions, historical context, regulatory controls, and economic constraints. <del>The major building systems of light wood frame, steel, and concrete and the technical and expressive opportunities inherent in each. Restricted to B.En.D. students.</del> <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b><u>Type of Action:</u></b></p> <ul style="list-style-type: none"> <li>. change course code and number.</li> <li>. modify title</li> <li>. add credit exclusion statement</li> <li>. modify description to remove content relating to building material systems, now covered in DES 330, Structural Systems and Supports</li> <li>. assign a course # and level that aligns with the course content; with the technical aspects of DES 330 out of the course, the course becomes a good candidate for 200-level coursework</li> </ul> <p><b><u>Rationale for Proposed Change:</u></b></p> <ul style="list-style-type: none"> <li>. course code and number change align with</li> </ul>

	<p>B.Des. curriculum proposal</p> <p><b>X Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b> DES 232 is restricted to B.Des., B.En.D. students.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 321</b> (3) <b>Architectural History I</b></p> <p><b>A global history of architecture pre-20<sup>th</sup> century.</b> Credit will be <b>granted</b> for only one of ARCH 404, ARCH 504 or <b>DES 321.</b></p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ARCH">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ARCH</a></p> <p><b><u>Present Calendar Entry:</u></b> <del>ARCH 404</del> (3) Architectural History I <del>Architecture from 1400 to 1900 and the design theory and practice that have shaped it.</del> <del>Restricted to B.En.D. students.</del> Credit will be <del>given</del> for only one of ARCH 405 or ARCH 505. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b><u>Type of Action:</u></b> . change course code and number . modify description</p> <p><b><u>Rationale for Proposed Change:</u></b> . course code and number change align with B.Des. curriculum proposal . DES 321 is an advanced foundational course on the history of architecture that will prepare students for 400-level courses in urban history and theory. DES 321 is most appropriately placed in year three.</p> <p><b>X Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b> DES 321 is restricted to B.Des., B.En.D.</p>

	students.
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 322</b> (3) Architectural History II</p> <p><b>A global history of architecture, 20th and 21st century.</b> Credit will be <b>granted</b> for only one of ARCH 405, ARCH 505 <b>or DES 322</b>. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ARCH">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ARCH</a>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ARCH">H</a></p> <p><b><u>Present Calendar Entry:</u></b>  <del>ARCH 405</del> (3) Architectural History II  <del>Critical analysis of developments in modern and contemporary architectural thought and practice. Restricted to B.En.D. students.</del> Credit will be <del>given</del> for only one of ARCH 405 or ARCH 505. <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><b><u>Type of Action:</u></b></p> <ul style="list-style-type: none"> <li>. change course code and number</li> <li>. modify description</li> <li>. amend credit exclusion statement</li> </ul> <p><b><u>Rationale for Proposed Change:</u></b></p> <ul style="list-style-type: none"> <li>. course code and number change align with B.Des. curriculum proposal</li> <li>. course description modified for clarity</li> </ul> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b>  DES 322 is restricted to B.Des., B.En.D. students.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 401</b> (9) Design Studio <b>V - Urban Systems Scale Synthesis</b></p> <p>Relationships between communities and environment, urban infrastructure and ecological systems.  <i>This course is not eligible for Credit/D/Fail grading.</i>  <b>Pre-requisite: DES 302</b></p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS</a></p> <p><del>ENDS 402</del> (3-9) <del>d Environmental</del> Design Studio <del>IV</del>  <del>Expands the scale and design enquiry to emphasize the</del> relationships between communities and environment, urban infrastructure, and ecological systems. <i>This course is not eligible for Credit/D/Fail grading.</i></p>

	<p><del>Prerequisite: ENDS 401.</del></p> <p><b><u>Type of Action:</u></b></p> <ul style="list-style-type: none"> <li>. change course code and number</li> <li>. modify title and description</li> <li>. remove variable credit</li> <li>. add pre-requisite</li> </ul> <p><b><u>Rationale for Proposed Change:</u></b></p> <ul style="list-style-type: none"> <li>. course code and number change align with B.Des. curriculum proposal</li> <li>. title and description modified for clarity</li> <li>. the variable credit entry was an error</li> </ul> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b> DES 401 is restricted to B.Des., B.En.D. students.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 421(3) Design Theory</b></p> <p>Introduction to a broad range of theories in architecture and design as they relate to the built environment. This course is not eligible for Credit/D/Fail grading.</p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ARCH">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ARCH</a> <a href="#">H</a></p> <p><b><u>Present Calendar Entry:</u></b> <del>ARCH 403 (3) Themes in Architecture and Design</del> Introduction to a broad range of themes in architecture and design. Restricted to B.En.D. students.</p> <p><b><u>Type of Action:</u></b></p> <ul style="list-style-type: none"> <li>. change course code and number</li> <li>. modify title and description</li> <li>. add pre-requisite</li> </ul> <p><b><u>Rationale for Proposed Change:</u></b></p> <ul style="list-style-type: none"> <li>. course code and number change align with B.Des. curriculum proposal</li> <li>. course description modified for clarity</li> </ul> <p><b>X      Not available for Cr/D/F grading</b></p>



	<p><b>(undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b> DES 421 is restricted to B.Des., B.En.D. students.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 430</b> (3) Environment, Urban Form <b>and Infrastructure</b></p> <p>Relationships between, and integration of, the natural environment and the physical form, spatial structure, <b>and infrastructure of livability of cities. This course is not eligible for Credit/D/Fail grading.</b></p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS</a></p> <p><b><u>Present Calendar Entry:</u></b> <del>ENDS 440</del> <b>(3) Environment and Urban Form</b> Relationships between, and integration of, the natural environment and the physical form, spatial structure, and livability of cities.</p> <p><b><u>Type of Action:</u></b> . change course code and number . modify title and description</p> <p><b><u>Rationale for Proposed Change:</u></b> . course code and number change align with B.Des. curriculum proposal . course description modified for clarity</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p> <p><b><u>Rationale for not being available for Cr/D/F</u></b> Restricted to B.Des., B.En.D. students.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>DES 450</b> (1-9) d Special Topics</p> <p><b>This course is not eligible for Credit/D/Fail grading.</b></p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;institution=2&amp;code=ENDS</a></p> <p><b><u>Present Calendar Entry:</u></b> <del>ENDS 482</del> (1-9) d Special Topics</p> <p><b><u>Type of Action:</u></b> . change course code and number.</p> <p><b><u>Rationale for Proposed Change:</u></b> . course code and number change align with B.Des. curriculum proposal</p> <p><b>X      Not available for Cr/D/F grading (undergraduate courses only)</b></p>

	<b><i>Rationale for not being available for Cr/D/F</i></b> DES 450 is restricted to SALA students.
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The University of British Columbia

Faculty of Applied Science

School of Architecture and Landscape Architecture

Program Change Proposal

**Bachelor of Design in Architecture, Landscape Architecture and Urbanism**

**B.Des.**

## **Appendix C**

### Calendar Entry

**November 1, 2016**

REVISED **December 11, 2016**

REVISED **January 20, 2017**

UBC Curriculum Proposal Form  
Change to Course or Program

Category: (1) Calendar Entry

<p><b>Faculty:</b> Applied Science  <b>Department:</b> School of Architecture and Landscape Architecture  <b>Faculty Approval Date:</b> 3 March 2016  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2018</p>	<p><b>Date:</b> 18 October 2016  <b>Contact Person:</b> Theresa Juba, Academic Coordinator  <b>Phone:</b> 604 822-0205  <b>Email:</b> tjuba@sala.ubc.ca</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p>The School of Architecture and Landscape Architecture</p> <p>Contents</p> <p>Introduction  Bachelor of Environmental Design  <b>Bachelor of Design in Architecture, Landscape Architecture and Urbanism</b>  Master of Architecture  Professional Association and Certification  Master of Advanced Studies in Architecture  Master of Landscape Architecture  Master of Advanced Studies in Landscape Architecture  Master of Architecture / Master of Landscape Architecture Dual Degree Program Option  Master of Urban Design  Professional Association and Certification  Academic Staff</p>	<p><b><u>URL:</u></b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,196,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,196,0,0</a></p> <p><b><u>Present Calendar Entry:</u></b></p> <p>The School of Architecture and Landscape Architecture</p> <p>Contents:</p> <p>Introduction  Bachelor of Environmental Design  Master of Architecture  Professional Association and Certification  Master of Advanced Studies in Architecture  Master of Landscape Architecture  Master of Advanced Studies in Landscape Architecture  Master of Architecture / Master of Landscape Architecture Dual Degree Program Option  Master of Urban Design  Professional Association and Certification  Academic Staff</p> <p><b><u>Action:</u></b>  . add proposed new degree 'Bachelor of Design in Architecture, Landscape Architecture and Urbanism' in Contents Page</p> <p><b><u>Rationale:</u></b>  The Bachelor of Design in Architecture Landscape</p>

	<p>Architecture and Urbanism . – proposed for first intake 2018W -- will exist alongside the B.En.D. until all current B.En.D. students have completed degree requirements.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p>Introduction</p> <p>A School within the Faculty of Applied Science</p> <p>Director's Office R. Kellett, Director 402-6333 Memorial Road Vancouver, BC V6T 1Z2 Tel: 604.827.7252 Fax: 604.822.3808 <a href="#">School of Architecture and Landscape Architecture</a></p> <p>The School of Architecture and Landscape Architecture offers an undergraduate degree Bachelor of Environmental Design (B.En.D.), graduate professional degrees in Architecture (M.Arch.), Landscape Architecture (M.L.A.), a dual degree Master of Architecture and Master of Landscape Architecture (M.Arch. / M.L.A.) and graduate post-professional degrees in Architecture (M.A.S.A.), Landscape Architecture (M.A.S.L.A.) and Urban Design (M.U.D.).</p> <p><b>Subject to Ministry of Advanced Education approval, the Bachelor of Design in Architecture, Landscape Architecture and Urbanism Program will accept applicants for admission to the 2018 Winter Session (September 2018). The Bachelor of Design in Architecture, Landscape Architecture and Urbanism will have an Honours Option.</b></p>	<p><b><u>URL:</u></b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,196,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,196,0,0</a></p> <p><b><u>Present Calendar Entry:</u></b></p> <p>Introduction</p> <p>A School within the Faculty of Applied Science</p> <p><b>Director's Office</b> Ron Kellett, Director 402-6333 Memorial Road Vancouver, BC V6T 1Z2 Tel: 604.827.SALA Fax: 604.822.3808 <a href="#">School of Architecture and Landscape Architecture</a></p> <p>The School of Architecture and Landscape Architecture offers an undergraduate degree Bachelor of Environmental Design (B.En.D.), graduate professional degrees in Architecture (M.Arch.), Landscape Architecture (M.L.A.), a dual degree Master of Architecture and Master of Landscape Architecture (M.Arch / M.L.A.) and graduate post-professional degrees in Architecture (M.A.S.A.), Landscape Architecture (M.A.S.L.A.) and Urban Design (M.U.D.).</p> <p><b><u>Type of Action:</u></b> . add newly proposed B.Des. (expected launch 2018W)</p> <p><b><u>Rationale for Proposed Change:</u></b> . acknowledges newly proposed B.Des. in approval process</p>
<p><b><u>Proposed Calendar Entry</u></b></p> <p><b>Bachelor of Design in Architecture, Landscape</b></p>	<p><b><u>URL:</u></b> N/A</p>

<p><b>Architecture and Urbanism</b></p> <p><b>Contents</b></p> <ul style="list-style-type: none"> <li>Introduction</li> <li>Admission</li> <li>Academic Regulations</li> <li>Degree Requirements</li> <li>Honours Option</li> <li>Coordinated International Experience</li> <li>Co-operative Education Program</li> <li>Minor in Arts</li> </ul>	<p><b><u>Present Calendar Entry:</u></b></p> <p>There is no present calendar entry. The proposed Bachelor of Design in Architecture, Landscape Architecture and Urbanism will be a new program entry.</p> <p><b><u>Action:</u></b></p> <p>Create new section in the calendar for the Bachelor of Design in Architecture, Landscape Architecture and Urbanism with the proposed order of content</p> <p><b><u>Rationale:</u></b></p> <p>. creates an entry for the new B.Des. program and an outline for content.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>Introduction</b></p> <p>The Bachelor of Design in Architecture, Landscape Architecture and Urbanism (B.Des.) provides an interdisciplinary learning environment that explores the connectedness of design across multiple scales. Students learn to observe how design impacts society and the environment as well as how cultural changes can be effected through the shaping of space. Students also learn to envision alternative constructs that are both socially and ecologically sustainable. The B.Des. is not a professional degree. The curriculum prepares students to undertake a self-directed path towards a number of possible futures including graduate studies in Architecture, Landscape Architecture, Urban Design, and other allied fields of design.</p> <p>Design is at the core of the curriculum, and is taught through a design sequence that begins with foundational skills and culminates in the design of complex spaces that are conceived of at a range of scales from the body to the city. Additional course work in history, theory, media, technology, and professional practice contribute to a well-rounded design curriculum. Elective course work provides the student opportunity to explore areas of his/her particular interest.</p> <p>The B.Des. equips tomorrow's design leaders and</p>	<p><b><u>URL:</u></b></p> <p>N/A</p> <p><b><u>Present Calendar Entry:</u></b></p> <p>There is no present calendar entry. The proposed Bachelor of Design in Architecture, Landscape Architecture and Urbanism is a new program.</p> <p><b><u>Action Required:</u></b></p> <p>Add Introduction and Academic Advising</p> <p><b><u>Rationale:</u></b></p> <p>To provide an overview of the B.Des. and information on academic advising.</p>

<p>practitioners with the critical thinking and practical skills necessary to make positive and meaningful contributions to the creation of designed environments at any scale.</p> <p><b>ACADEMIC ADVISING</b> Academic Advising is available through the Bachelor of Design Office located in Macmillan 379, 2357 Main Mall, Vancouver, B.C., V6T 1Z4. The office is open year-round Monday to Friday, 9 am – 4 pm for enquiry in-person, telephone (604) (822-6916) or e-mail <a href="mailto:des@sala.ubc.ca">des@sala.ubc.ca</a>.</p>	
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>ADMISSION</b></p> <p>The School takes in to consideration the breadth of each application including the applicant's academic achievement and intellectual readiness and evidence of creativity and design aptitude to select the most competitive students for the Bachelor of Design in Architecture, Landscape Architecture and Urbanism.</p> <p>Admission to the Bachelor of Design is competitive. Applicants who meet the minimum criteria are not guaranteed admission.</p> <p>UBC's procedures, policies, and general admission requirements are specified in <a href="#">Admissions</a>.</p> <p><b>Application and Document Submission</b></p> <p>Applicants are directed to <a href="#">Undergraduate Admission Procedure</a> for detailed information on UBC Undergraduate Admission requirements.</p> <p>Additional requirements for all applicants to the Bachelor of Design consist of participation in a video interview as a component of the <a href="#">Personal Profile</a>, completion of a Creative Test and submission of a 1-2 page Resume. Further information is available at <a href="#">Bachelor of Design</a>.</p>	<p><b><u>URL:</u></b> N/A</p> <p><b><u>Present Calendar Entry:</u></b> There is no calendar entry. The proposed Bachelor of Design in Architecture, Landscape Architecture and Urbanism is a new program entry.</p> <p><b><u>Type of Action:</u></b> . Add admission requirements for B.Des. applicants including applicants from Secondary Study and Post-Secondary Study including current UBC Students and former UBC Students.</p> <p><b><u>Rationale for Proposed Change:</u></b> . The proposed entry aligns with UBC admissions procedures and the B.Des. proposal.</p>

The applicant is responsible for ensuring that all supporting documents, including official transcripts, are submitted by the [published deadlines](#).

#### Admission from Secondary School

In addition to satisfying [general university admission requirements \(as appropriate to the secondary school curriculum being presented\)](#), applicants must have completed either History or Geography at the BC Grade 12-level or the equivalent. Applicants are directed to UBC's policies on [Admission from Secondary School](#) for detailed information.

#### Admission and Transfer from Post-Secondary Study

Applicants seeking admission from post-secondary study require an overall average of 65% or better calculated on the most recent transferable credits with a minimum of 24 and a maximum of 30 transferable post-secondary credits, including any failed courses. The overall average is calculated in accordance with the [general admission requirements for applicants from a college or university](#).

In addition, applicants require a minimum core design average of 65% on all attempts of DES 110, 200, 220, 230, VISA 180 or their equivalent.

Applicants are directed to UBC's policies on [Admission from Post-Secondary Study](#) for detailed information.

To be eligible for consideration for admission to second year standing in the B.Des. program, applicants must have completed the following UBC requirements or their equivalent

- . Reading requirement as described in year one requirements (3 credits)

- . Writing requirement as described in year one



<p><b>requirements (3 credits)</b></p> <p>. Geography requirement as described in year one requirements (3 credits)</p> <p><b>6-12 credits Electives</b></p> <p>. 6 credits of DES 200, 220, 230 and 3 credits of DES 110 or VISA 180</p> <p>Students with 24 or more transferable credits who are deficient in more than one of the above requirements will be considered for first year only.</p> <p>Applicants who have greater than 6 but fewer than 24 transferable credits may be eligible for first year entry and are required to meet the requirements for both Post-Secondary Study and Secondary School as noted above. Further information is available at <a href="#">Applicants from a College or University</a>.</p> <p>Applicants from another UBC Degree Program or Campus are directed to <a href="#">Change of Degree Program</a> and/or <a href="#">Change of Campus</a> for further information. Applicants who are former UBC students are directed to <a href="#">Readmission</a> for further information.</p> <p>Post-secondary applicants may contact Bachelor of Design Advising for a review of course equivalency for consideration for promotion purposes.</p>	
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>ACADEMIC REGULATIONS</b></p> <p>Students are subject to UBC's <a href="#">Academic Policies and Regulations</a> and are directed in particular to UBC's policies on <a href="#">Student Declaration and Responsibility</a>, <a href="#">Academic Honesty and Standards</a> and <a href="#">Academic Freedom</a>.</p>	<p><b><u>URL:</u></b> N/A</p> <p><b><u>Present Calendar Entry:</u></b> There is no present calendar entry. The proposed Bachelor of Design in Architecture, Landscape Architecture and Urbanism is a new program.</p> <p><b><u>Action Required:</u></b> Add Academic Regulations including identifying</p>

**Dean's Honour List**

A student with high academic achievement will be acknowledged with the notation 'Dean's Honour List' on the academic transcript as follows:

- . in Year 2 with a sessional academic average of 80% or better while taking 24 or more credits
- . in Year 3 or 4 with a sessional academic average of 80% or better while taking 30 or more credits

**Degree with Distinction**

A student with a high overall academic achievement will be granted a degree with Distinction upon graduation if he or she achieves an overall average of 80% or better on all 200-level and higher courses while registered in the B.Des. program. 'Degree with Distinction' will be notated on both the academic transcript as well as the degree parchment.

**Design Studio Requirement**

Students must register in a design studio course (DES 201, 202, 301, 401, 402 or 403) in each term of years two to four of each Winter Session.

**Academic Performance Evaluation**

Academic performance evaluations (Sessional Academic Evaluations) are conducted for each student at the end of each Winter Session in order to evaluate a student's eligibility to continue, for promotion to the subsequent year and for eligibility for graduation.

One of three Academic Standings is assigned as a result of a Sessional Academic Evaluation: In Good Standing, On Academic Probation, Failed.

Academic standing and progression requirements are listed for each year in the table below.

policies for readmission after failed standing.

**Rationale:**

. The proposed regulations align with UBC academic regulars and readmission procedures and the B.Des. proposal.

Year Level	Sessional Academic Average	Academic Standing at the Time of Evaluation	Resulting Academic Standing	Promotion Status
1	60% or better	Any Standing	In Good Standing	Eligible to continue
1	50% - 59.9%	In Good Standing	On Academic Probation	Eligible to continue

1	50% - 59.9%	On Academic Probation	Failed	Required to discontinue
1	Less than 50%	Any Standing	Failed	Required to discontinue
2-4	60% or better	Any Standing	In Good Standing	Eligible to continue
2-4	50% - 59.9%	In Good Standing	On Academic Probation	Eligible to continue
2-4	50% - 59.9%	On Academic Probation	Failed	Required to discontinue
2-4	Less than 50%	Any Standing	Failed	Required to discontinue

**A student with a second Failed Standing will be required to withdraw from the University.**

#### **Returning to Good Standing from Academic Probation**

A student on Academic Probation, i.e. achieved a sessional average between 50% - 59.9%, is required to meet with the Bachelor of Design Student Services Coordinator in order to develop a schedule of courses for the subsequent year. The student must achieve a Sessional Academic Average of 60% or better in the approved schedule of courses during the next registered session in order to return to Good Standing. The schedule must be approved by the Chair of the Bachelor of Design or his or her designate.

#### **Advancement**

Promotion from Year 1 to Year 2 is achieved by completing a minimum of 24 credits including DES 101, either DES 110 or VISA 180, two of DES 200, DES 220 and DES 230.

Promotion from Year 2 to Year 3 is achieved by completing a minimum of 55 credits including all required courses from first year including the Reading, Writing and Geography requirements, DES 201, 202, 211, 212, 231, 232 and one of 321, 322, 323.

Promotion from Year 3 to Year 4 is achieved by completing a minimum of 90 credits including all required courses from second year and all of DES 301, 302, 330, 421 and one of 321, 322, 323.

Current students may appeal year standing decisions to the Chair of the Bachelor of Design. Further information is available at [Advancement Regulations](#).

**Credit/D/Fail Standing**

Students in the Bachelor of Design may complete up to twelve elective credits for Credit/D/Fail standing with the exception of any DES course which requires evaluation by percentage grade.

Students transferring to the Bachelor of Design may not apply any of the required courses previously taken using Credit/D/Fail grading toward their B.Des. degree. The student must either change the course to a percentage grade upon entry into the Bachelor of Design program or must retake the course or an approved alternate once admitted into the program.

Further information is available at [Credit/D/Fail Grading](#).

**Readmission after Failed Standing**

Students who have been required to withdraw due to a failed standing must apply in order to be readmitted to the program. The earliest a student may be readmitted is twelve months after being required to withdraw due to a failed standing. An application for readmission must be submitted to the Student Service Centre by the [readmission deadline](#). The application must include a Letter of Appeal outlining how the student has prepared to succeed in further studies at UBC and two letters of reference pertaining to the student's recent academic and/or work experience.

A student intending to apply for readmission is required to meet with the Student Services Coordinator in the Bachelor of Design Program in order to develop a plan for readmission.

Readmission to the B.Des. is not guaranteed. Readmission decisions take in to account the number of seats available as well as the strength of the applicant against the applicant pool in any given year.

Readmission to the B.Des. after two failed

<p>standings is normally not approved.</p> <p>Further information is available at <a href="#">Readmission</a>.</p>																																																					
<p><b>Proposed Calendar Entry:</b></p> <p><b>DEGREE REQUIREMENTS</b></p> <p>A student is eligible for a Bachelor of Design in Architecture, Landscape Architecture and Urbanism after obtaining credit for all courses listed in the program of study. This requirement will normally be met by completing four Winter Sessions with a full credit load.</p> <p>A student transferring from a program of study outside the Bachelor of Design program at another Post-Secondary Institution may be granted <a href="#">Transfer Credit</a>.</p> <p><b>Year One</b></p> <table> <tr> <td>DES 101, Introductory Workshop</td><td>1</td></tr> <tr> <td>One of DES 110, Measured Architectural Drafting or VISA 180, Studio One, Foundation and Media</td><td>3</td></tr> <tr> <td>Two of DES 200, Design Thinking;</td><td>6</td></tr> <tr> <td>DES 220, Architecture In Context: Vancouver and the Region;</td><td></td></tr> <tr> <td>DES 230, Sustainability by Design</td><td></td></tr> <tr> <td>Reading Requirement<sup>1</sup></td><td>3</td></tr> <tr> <td>Writing Requirement<sup>2</sup></td><td>3</td></tr> <tr> <td>Geography Requirement<sup>3</sup></td><td>3</td></tr> <tr> <td>Electives<sup>4</sup></td><td>12</td></tr> </table> <p><b>Total: 31</b></p> <p><b>Year Two</b></p> <table> <tr> <td>DES 201, Design Studio I – Context and Site</td><td>6</td></tr> <tr> <td>DES 202, Design Studio II – Form</td><td>6</td></tr> <tr> <td>DES 211, Design Media I</td><td>3</td></tr> <tr> <td>DES 212, Design Media II</td><td>3</td></tr> <tr> <td>DES 231, Site Analysis and Planning</td><td>3</td></tr> <tr> <td>DES 232, Material Culture</td><td>3</td></tr> <tr> <td>One of</td><td>3</td></tr> <tr> <td>DES 321, Architecture History I</td><td></td></tr> <tr> <td>DES 322, Architecture History II</td><td></td></tr> <tr> <td>DES 323, Histories in Landscape Architecture</td><td></td></tr> <tr> <td>Electives<sup>4</sup></td><td>3</td></tr> </table> <p><b>Total: 30</b></p> <p><b>Year Three</b></p> <table> <tr> <td>DES 301, Design Studio III - Building Scale Synthesis</td><td>9</td></tr> <tr> <td>DES 302, Design Studio IV - Vancouver</td><td>9</td></tr> <tr> <td>DES 330, Structural Systems and Supports</td><td>3</td></tr> <tr> <td>DES 421, Design Theory</td><td>3</td></tr> <tr> <td>One of</td><td>3</td></tr> <tr> <td>DES 321, Architecture History I</td><td></td></tr> </table>	DES 101, Introductory Workshop	1	One of DES 110, Measured Architectural Drafting or VISA 180, Studio One, Foundation and Media	3	Two of DES 200, Design Thinking;	6	DES 220, Architecture In Context: Vancouver and the Region;		DES 230, Sustainability by Design		Reading Requirement <sup>1</sup>	3	Writing Requirement <sup>2</sup>	3	Geography Requirement <sup>3</sup>	3	Electives <sup>4</sup>	12	DES 201, Design Studio I – Context and Site	6	DES 202, Design Studio II – Form	6	DES 211, Design Media I	3	DES 212, Design Media II	3	DES 231, Site Analysis and Planning	3	DES 232, Material Culture	3	One of	3	DES 321, Architecture History I		DES 322, Architecture History II		DES 323, Histories in Landscape Architecture		Electives <sup>4</sup>	3	DES 301, Design Studio III - Building Scale Synthesis	9	DES 302, Design Studio IV - Vancouver	9	DES 330, Structural Systems and Supports	3	DES 421, Design Theory	3	One of	3	DES 321, Architecture History I		<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> There is no present calendar entry. The proposed Bachelor of Design is a new program entry.</p> <p><b>Action:</b> Add degree requirements</p> <p><b>Rationale:</b> To describe the degree requirements for the B.Des.</p>
DES 101, Introductory Workshop	1																																																				
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<p>DES 322, Architecture History II DES 323, Histories in Landscape Architecture Electives<sup>4</sup> 9</p> <p><b>Total: 36</b></p> <p><b>Year Four</b></p> <p>ENDS 401, Design Studio V - Urban Systems Synthesis 9 ENDS 402, Design Studio VI: Senior Project 9 ENDS 422, Urbanism by Design 3 ENDS 430, Environment, Urban Form and Infrastructure 3 ENDS 445, Entrepreneurship and Ethics in Design 3 Electives<sup>4</sup> 9</p> <p><b>Total: 36</b></p> <p><b>Program Total: 133</b></p> <ol style="list-style-type: none"> <li>1 The Reading Requirement can be fulfilled by successfully completing 3 credits from one of ARTH 101, 102, ENGL 110, 111, 120 or the equivalent.</li> <li>2 The Writing requirement can be fulfilled by successfully completing ENGL 112. Transfer students can meet this requirement with ENGL 100, WRDS 150, ASTU 100 or the equivalent</li> <li>3 The Geography Requirement can be fulfilled by successfully completing one of GEOB 102, 103, GEOG 121, 122 or the equivalent. GEOB 102, 103 or Physical Geography equivalent highly recommended</li> <li>4 Recommended elective courses are identified at the B.Des. website. A minimum of 12 credits of senior-level courses must be included within the elective requirements.</li> </ol>	
<p><b>Proposed Calendar Entry:</b></p> <p><b>HONOURS OPTION</b></p> <p><b>Admission to the Bachelor of Design Honours Option is by application and requires meeting honours option entry requirements and completion of an independent senior design project (DES 403) in year four in lieu of DES 402.</b></p> <p><b>Entry to the Honours Option requires achievement of a sessional average of 80% or better in each of year two and three and a grade of 80% or better in each of DES 201, 202, 301 and 302.</b></p> <p><b>Graduation from the Honours Option requires a grade of 80% or better in DES 401 and 403.</b></p> <p><b>Successful completion of the Honours Option will</b></p>	<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> There is no present calendar entry. The proposed Bachelor of Design is a new program entry.</p> <p><b>Action:</b> Add Honours Option</p> <p><b>Rationale:</b> To describe the requirements for the B.Des. Honours Option</p>

<p>be reflected on the academic transcript and degree parchment with the notation Bachelor of Design (Hons.) in Architecture, Landscape Architecture and Urbanism</p>	
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>COORDINATED INTERNATIONAL EXPERIENCE</b></p> <p>The Coordinated International Experience (CIE) program offers a student the opportunity to apply to study a pre-selected and pre-approved set of courses over one academic term at an international CIE partner institution. The student gains new, global perspectives with the credit received from courses completed counting towards the student's B.Des. degree.</p> <p>Participation in the CIE program is by application. A student may apply in the second term of Year 2 in order to participate in the CIE program in the second term of Year 3 in lieu of DES 302 and required elective course work. Admission to the CIE program is competitive and admittance can not be guaranteed.</p> <p>The CIE program is administered by the Faculty of Applied Science. Further information is available at the Bachelor of Design <a href="#">website</a>.</p>	<p><b><u>URL:</u></b> N/A</p> <p><b><u>Present Calendar Entry:</u></b> There is no present calendar entry</p> <p><b><u>Action:</u></b> Add Coordinated International Experience option</p> <p><b><u>Rationale:</u></b> To identify this option and the requirements for this option.</p>
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>CO-OPERATIVE EDUCATION PROGRAM</b></p> <p>An optional Co-operative Education Program providing relevant, faculty-monitored and paid work experience is available for motivated and qualified students.</p> <p>Co-op terms are 4 months long and are available by application. The Co-op is available to students who choose to participate for one, two, three, or more terms.</p> <p>Placements may be domestic or international with total enrolment subject to the availability of</p>	<p><b><u>URL:</u></b> N/A</p> <p><b><u>Present Calendar Entry:</u></b> There is no present calendar entry</p> <p><b><u>Action:</u></b> Add the Co-operative Education Program option</p> <p><b><u>Rationale:</u></b> To identify this option and the requirements for this option.</p>

<p><b>work placements.</b></p> <p>Participation in the Co-operative Education Program includes mandatory participation in three pre co-op term workshops providing preparatory skills for the work terms. A fee is assessed for the workshops.</p> <p>Each of the four-month co-op terms requires registration in a six-credit co-op course.</p> <p>Students who complete three work terms or more (18 or more credits) including two terms in the Winter Session and one term in the Summer Session, will have successfully completed the requirements for the full Co-operative Education Program. The minimum eighteen credits are completed in addition to the academic requirements for the Bachelor of Design.</p> <p>Successful completion of the requirements for the Co-operative Education Program includes satisfactory completion of each of the three co-op terms including the academic requirements for each co-op term. Successful completion of the Co-operative Education Program will be reflected on the transcript and parchment.</p> <p>Students intending to apply must submit an application in September of Year 3.</p> <p>Admission to the Co-operative Education Program is competitive and admittance can not be guaranteed.</p> <p>The Co-operative Education Program is coordinated by the Applied Science Co-operative Education Office. Further information is available at the Bachelor of Design <a href="#">website</a>.</p>	
<p><b><u>Proposed Calendar Entry:</u></b></p> <p><b>MINOR IN ARTS</b></p> <p>A student in the Bachelor of Design may apply to undertake an 18 credit Minor in Arts or a 30 credit subject-specific Minor in Arts as noted below.</p>	<p><b><u>URL:</u></b> N/A</p> <p><b><u>Present Calendar Entry:</u></b> There is no present calendar entry</p> <p><b><u>Action:</u></b> Add the Minor in Arts option</p>



<p>An 18 credit Minor in Arts must comprise courses in the Faculty of Arts that are for credit toward a B.A. degree and must consist of a minimum of 18 upper-level (300-400) credits in a single subject or field of specialization. Students should design a coherent and academically sound course of studies for the proposed Minor. The program must be approved by an Advisor in the Bachelor of Design Office. Upon successful completion of the minor program, the notation 'Minor in Arts' will be noted on the student's academic transcript.</p> <p>A 30 credit subject-specific Minor comprises courses in a specific Arts discipline's major, minor program or field of specialization, requiring the completion of at least thirty credits in a single subject or field of specialization, of which at least 18 credits must be numbered 300 or higher. The proposed course of studies must be approved by the Chair of the Bachelor of Design or his or her designate following approval from an advisor from the appropriate unit within the Faculty of Arts. Upon successful completion of the 30 credit Minor program, the subject specific Minor or field of specialization will be added to the student's academic transcript by including the notation 'Minor in [Subject]'.</p>	<p><b><u>Rationale:</u></b> To identify this option and the requirements for this option.</p>
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The University of British Columbia

Faculty of Applied Science

School of Architecture and Landscape Architecture

Program Change Proposal

**Bachelor of Design in Architecture, Landscape Architecture and Urbanism**

**B.Des.**

## **Appendix D**

### Transition Plan

**November 01, 2016**

## 1. Summary

### 1.1 Transition by Year

The transition from the B.En.D. degree to a fully subscribed B.Des. degree will take place over the course of 4 years. As some B.En.D. courses are renamed and assigned a new course code for the B.Des program, the year the course switches to a B.Des. course is dependent on what year it is no longer necessary for B.En.D. student degree requirements, and what year it becomes necessary for B.Des. degree requirements.

In 2017:

- Admissions to the B.En.D. program will be conducted for the last time. The program will include 30 3<sup>rd</sup> year B.En.D. students and 30 4<sup>th</sup> year B.En.D. students.
- In addition, several courses from the first year and second year of the B.Des. curriculum will be launched using the ENDS code.

In 2018:

- The last class of B.En.D. students will enter their 4<sup>th</sup> year of study.
- Admissions for the B.Des. program will be conducted for the first time. As many as 30 students will be enrolled in the 1<sup>st</sup> year of the program.
- In addition, 2<sup>nd</sup> or 3<sup>rd</sup> year students at UBC who took a sufficient number of B.Des. foundation courses can apply to transfer into the 2<sup>nd</sup> year of the B.Des. program. This allows for students in the gap between years to enrol in the B.Des program; it allows SALA to keep the program staffed and running.
- The 1<sup>st</sup> year and 2<sup>nd</sup> year curriculum of the B.Des. program will be offered alongside the 4<sup>th</sup> year curriculum of the B.En.D. program.
- The course code and number of several courses that already exist but are part of the 1<sup>st</sup> year and 2<sup>nd</sup> year B.Des. curriculum switch to the B.Des. course code.

In 2019:

- All B.En.D. students who followed the curriculum will have graduated.

- Any off-track B.En.D. student who has not completed the degree requirements and graduated can take alternative courses to finish the degree.
- The 1<sup>st</sup> year, 2<sup>nd</sup> year and 3<sup>rd</sup> year curriculum of the B.Des. program will be offered.

In 2020:

- The B.Des. degree will be complete with enrollment of 30 students across 4 years.
- All years of the curriculum will be offered.

Sometime in the future:

- Enrollment for the B.Des. degree will increase to 45 students a class. This increase of student body is contingent on the fulfillment of space needs.

## 1.2 Alternatives for Off-track students

In the transition years, B.En.D. students who miss a course and fall off-track can take the following alternatives to their required courses. The majority of the courses have an alternate that is suitable and offered in the year following their respective phasing out of the B.En.D. curriculum.

The courses that do not have alternatives that are available in the following year are ARCH 403: Themes in Architecture and Design, ENDS 420: Technology and Technique, and ENDS 440: Environment and Urban Form.

- Both ARCH 403 and ENDS 440 have 2-year pause until they are offered again; most likely too long of a time for a student to wait to complete his or her degree. If a student falls off-track with this course, the B.Des. Program Chair will find a suitable 3-credit directed study to conduct with the student to aid in the fulfillment of the degree requirement.
- ENDS 420 is a course that is phased out in the B.Des. curriculum. If a student falls off-track with this course, the B.Des. Program Chair will find a suitable 3-credit course in the Masters of Architecture or Masters of Landscape Architecture curriculum for the student to take, or find a suitable 3-credit directed study to conduct with the student to aid in the fulfillment of the degree requirement.

B.En.D. Curriculum		Last required for on-track student	Suitable Alternate	First offered in BDes
ENDS 101	Introductory Workshop	2017W	DES 101	2018W
ENDS 220	Architecture in Context: Vancouver and its Region	2017W	DES 220	2018W
ENDS 301	Environmental Design Studio I	2017W	DES 201	2018W
ENDS 320	Design, Media and Representation	2017W	DES 211	2018W
LARC 440	Site Analysis and Planning	2017W	DES 231	2018W
ARCH 403	Themes in Architecture and Design	2017W	DES 421	2020W
ARCH 437	Geometric Modeling	2017W	DES 212	2018W
ENDS 302	Environmental Design Studio II	2017W	DES 202	2018W
ENDS 420	Technology and Technique	2017W	>	>
ARCH 411	Materials and Methods of Construction	2018W	DES 232	2018W
ARCH 404	Architectural History I	2018W	DES 321	2018W
LARC 522	Histories in Landscape Architecture	2018W	DES 323	2018W
ENDS 401	Environmental Design Studio III	2018W	DES 301	2019W
ENDS 402	Environmental Design Studio IV	2018W	DES 302	2019W
ENDS 440	Environment and Urban Form	2018W	DES 430	2020W
LARC 431	Landscape Technologies I	2018W	LARC 531	
ARCH 405	Architectural History II	2018W	DES 322	2018W

### **1.3 Students who want to transfer from B.En.D. to B.Des.**

It is possible that students accepted into the B.En.D. program will be interested in switching to the B.Des. program. The one point one would imagine this occurring is a 3<sup>rd</sup> year B.En.D. student who has completed the 3<sup>rd</sup> year curriculum in 2018, and has the time to pause their study with a Co-operative Education experience before cycling back in to join the B.Des. cohort. While the Co-operative Education Program is not available to B.En.D. students, an exception can be made and a B.En.D. student who has completed a full 3<sup>rd</sup> B.En.D curriculum can go engage in Co-op for three or four terms. One year later, in 2019 W1, this student will be allowed to enter the 3<sup>rd</sup> year curriculum of the B.Des. Program. Because some of the equivalent courses will have already have been taken by this student, a modified study plan will have to be followed. The choice to transfer from B.En.D. to B.Des. would add a year of study plus a year of co-op terms onto a students' study plan, lengthening the duration of the Bachelor's degree from 4 to 6 years; for this reason we imagine students will chose this path in rare circumstances. However, this particular student will have semesters with lighter course loads in their 5<sup>th</sup> year, so it is possible that this student could use the extra time to do extra-curricular internships, and make the most of their slower path through their Bachelor's degree.

The modified course of study would look like this:

*1.3.1 Table of Study Plan for student admitted to B.En.D. in 2017 and wishing to transfer to B.Des. degree.*

### **1.4 Addressing the 1-year gap in the B.En.D. to B.Des. offering**

Post-secondary students in their second year who desire entrance to the B.En.D. program in 2018 (as 3<sup>rd</sup> year students) may not be aware that the degree is no longer offered in 2018. To this end, we will describe the new degree on our calendar statement and website as soon as we receive Board of Governor's Approval. On both of these sites, we will be explicit about the fact the degree is pending Ministry Approval.

The possibility of conducting admissions for B.En.D and B.Des. simultaneously in 2018 and admitting a 1<sup>st</sup> and 2<sup>nd</sup> year B.Des. class *as well* as a 3<sup>rd</sup> year B.En.D class has been considered. However, this possibility has been not pursued for the following reasons: B.Des is a more robust program, and finite teaching resources.

- The B.Des. program is a more robust education in design and design thinking than the current B.En.D. program. Once the new program is launched, it is our hope that students will see the benefits of the B.Des program and make provisions to be admitted to the B.Des program, even if this means adding a year onto their undergraduate degrees.
- SALA has finite teaching resources for the delivery of the B.En.D. program as well as the B.Des. program. It is the intention to maintain the full-time faculty and adjuncts we employ in the program for the program delivery. It is also the intention to bring in more adjuncts and hopefully a new faculty member for the delivery of the program. However, we anticipate the necessity of a ramping-up phase as we add more adjuncts and search for a new faculty member. Maintaining the B.En.D. degree for an additional year requires SALA to grow the teaching staff for these programs in a spurt in 2018. While this is possible, the sudden growth of teaching staff is not an attractive option for SALA as we'd prefer to select our teaching staff with care and sufficient deliberation.

15 February 2017

To: Vancouver Senate  
From: Senate Curriculum Committee  
Re: Master of Global Surgical Care (approval)

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The Senate Curriculum and Admissions Committees have reviewed the material forwarded to them by the Faculty of Graduate and Postdoctoral Studies (Medicine) and enclose those proposals they deem ready for approval.

The following is recommended to Senate:

**Motion:** *“That the new Master of Global Surgical Care degree program, to be administered by the Faculty of Graduate and Postdoctoral Studies (Medicine), and its associated new courses be approved.”*

Respectfully submitted,

Dr. Peter Marshall, Chair, Senate Curriculum Committee  
Dr. Robert Sparks, Chair, Senate Admissions Committee



**NEW PROGRAM PROPOSAL: MASTER OF GLOBAL SURGICAL CARE**  
**FACULTY OF MEDICINE**  
**UNIVERSITY OF BRITISH COLUMBIA**

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## 1. Executive Summary

### 1.1 Overview

The University of British Columbia has effectively created a learning environment that fosters global citizenship. Internationalization of higher education is a challenging goal that students increasingly demand of academic institutions. The attainment of global relevance is a constantly evolving process, throughout every aspect of the three core missions of the University: research, teaching and learning, and community engagement.

The Faculty of Medicine's (Department of Surgery) proposed Masters in Global Surgical Care is inspired by this goal of internationalization. It offers the unique combination of learning experiences to provide students in health-care related disciplines with a comprehensive and innovative education, enabling them to build on their disciplinary knowledge and skills. The program will expand students' knowledge of conditions, and global circumstances, that shape surgical care internationally.

### 1.2 Contribution to UBC's Mandate and Strategic Plan

*"As one of the world's leading universities, The University of British Columbia creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world."*

*Place and Promise: The UBC Plan, our vision statement*

The proposed Masters program will contribute to UBC's goal of student learning and professional development by offering educational opportunities in the growing field of Global Surgical Care. We will engage the community by promoting collaboration with local and global stakeholders in the areas of academic research and hands-on fieldwork placements in low resource settings. The program will offer an exceptional learning environment for students and faculty, attracting students from around the world to learn about Global Surgical Care. Graduates of the program will be sought after Ambassadors for the program and the University.

### 1.3 Rationale

Consultations with stakeholders have revealed that surgical care clinicians, residents in training and health professionals from many disciplines wish to incorporate international surgical care into their careers. They actively seek out institutions offering global experiences, that allow them to pursue training and experiences to prepare them to make effective contributions in addressing the surgical care problems of underserved populations either nationally or internationally.

Global surgical care delivery projects, international partnerships focused on surgical care education and research, and global disasters either man made or natural requiring a surgical care response all highlight the opportunities and necessity for appropriately trained health professionals. Unfortunately, these opportunities can prompt unease in healthcare related professionals who are asked to provide surgical and other services for which they are ill-equipped, either due to deficiency in training or emotional preparedness. As a result, approaches to care, while well-intentioned, can be inappropriate and detrimental to patients.

This Masters program bridges the gap between the international demand and the health professional's education to meet the learning needs of this growing cadre of students. Currently, there are no accredited

graduate-level degree programs available to this cadre that focus on surgical care issues and this proposed Masters program would be unique in the world.

#### **1.4 Objectives**

The Masters program will position UBC as a leading institution for continuing education training of current leaders and for the training of tomorrow's leaders in the global surgical care field.

Upon completion of this Masters program students will be able to:

- Articulate and discuss both historical and current dimensions of the evolving global surgical care discipline;
- Apply critical thinking to current and proposed global surgical care projects and programs;
- Provide leadership in global surgical care, including in the areas of care delivery, infrastructure development, education and research;
- Analyse barriers to surgical care in underserved populations globally, including both internationally and within Canada (e.g. rural Indigenous communities) and foster solutions;
- Initiate, design, implement and evaluate a surgical care project (research or educational development) in partnership with host colleagues of a low resource setting globally;
- Critique programs of disaster mitigation and contribute to disaster readiness both nationally and internationally;
- Actively contribute to monitoring and evaluation programs of global health initiatives;
- Provide leadership in advocacy at decision making levels for addressing the unmet surgical care burden of underserved populations globally;
- Apply the skills of one's own professional background to the spectrum of the global surgical care discipline.

#### **1.5 Demand for the Program**

Surveys of the Graduate Certificate in Global Surgical Care (GCGSC) launch cohort (15 students, 100% response rate), reveal that 93% of current Certificate students plan to enroll in the MGSC as soon as it becomes available. Findings gathered from a 2012 UBC Sauder School MBA led Marketing Plan, combined with consultations from a variety of B.C., Canadian, and internationally led organizations involved in healthcare, education, human resources, international development, and eLearning (e.g. Canadian Network for International Surgery, Canadian Red Cross, King's College London, and McGill University etc.), support the continued development of the academic program being offered through the Branch for International Surgical Care. A few highlights include:

- A definite interest by industry stakeholders and past students in taking a Global Surgery focused Masters in the future.
- It was also noted that our courses are unique and that was attractive to participants and stakeholders in that it gave them a chance to show leadership.
- The interest rating in global surgery was already quite high at 75% of those surveyed and that number was predicted to continue to increase on an annual basis.

Feedback from surveys, consultations, and analysis has helped shape the format of the proposed program, in particular emphasising the need for improved surgical care in Canada's Indigenous communities, as well as, the importance of fieldwork for our target student demographic.

#### **1.6 Program Strengths**

The program will:

- Provide a unique link between content experts from across the global health community and graduate students to develop policy and support scalable solutions for the development of functional surgical care systems.
- Address the gap that exists between surgical need and the equitable provision of safe surgical care in low resource settings, including areas of conflict, natural disaster, and in high-income countries with regional disparities in health care (remote Indigenous communities within Canada).
- Give students the option to ladder a Graduate Certificate in Global Surgical Care (already in place) into a unique Masters degree; in accordance with Senate regulations (Appendix A).
- Address issues of leadership, culture, and communication as a core component of global health systems, and incorporate a foundation of program planning and evaluation combined with research skills that can be directly applied to the delivery and governance of global surgical care.
- Incorporate multidisciplinary and interdisciplinary foci into the curriculum and bring together current and new knowledge from allied health professions within the field.
- Be available across Canada, and internationally using an on-line model.
- Include a six-credit field practicum, which will enable students to synthesize the knowledge gained from the coursework, transfer their knowledge to one aspect of International Surgical Care practice, and demonstrate achievement of the Masters Program objectives.
- Have flexible admission requirements to allow exceptional multidisciplinary global surgical care leaders to be accepted into the program to enhance professional collaboration in the field.
- Provide an opportunity to learn within a multidisciplinary environment with access to world leading experts in research and practical real world applications.

### **1.7 Linking learning outcomes and curriculum design**

In recent years there has been a growing interest and active involvement in the field of global surgical care among both clinicians and trainees. In the past two decades, centres of Global Surgical Care have been established in eight of Canada's seventeen University Medical Schools. Professional Societies such as the Canadian Association of General Surgeons and the Canadian Society of Obstetricians & Gynecologists have created committees to coordinate this interest and activity among their members. The World Health Association established a priority section on Global Surgery in 2005 and the Lancet sponsored an international-wide commission on the topic leading to the important Lancet Report in 2015. Yet, a common observation by both travelling participants and host colleagues is that the participants are academically unprepared to credibly apply their professional skills to the low-resource, cross cultural experience. This has led to a growing request for such educational programs in the discipline of global surgical care.

The curriculum of the proposed Masters in Global Surgical Care is designed to academically focus on the depth of understanding and knowledge required for surgical care professionals to apply their skills in low resource settings globally. Courses have been specifically created to address the major causes of global unmet surgical care burden of disease. Designed on-line didactic content, interactive discussions, literature reviews and reflective assignments on topics from these major causes emphasize both the understanding and the application of that understanding to provide needed leadership in the discipline. Graduates will be capable of giving that leadership. Courses on project and research methodology and on monitoring and evaluation methodology, together with a supervised field practicum will enable graduates to determine barriers, challenges and opportunities present in unmet surgical care burdens and to propose and facilitate solutions, in partnership with national host colleagues, to these burdens. They will significantly contribute both as prepared participants and as leaders in the discipline.

## **2. Program Description and Specifics**

### **2.1 Curriculum Overview**

The Masters in Global Surgical Care is a 30 credit program delivered online over two years. It is designed to meet the growing need for professional development of students interested in focusing on the global health problem of the burden of unmet surgical care. Students will complete nine online courses, including a field practicum in a low resource setting.

The focus in Year 1 of the program is to provide students with a foundation in international healthcare by exploring the principles of development, indigenous experiences, ethics, program planning, monitoring & evaluation, and humanitarian disaster response. Each course brings different and complementary essential aspects, providing depth and breadth to unique subjects in global surgical care. Students will relate cross-functional perspectives to their current professional roles. Learning will focus on students reviewing research journal articles, viewing pre-recorded videos, completing course specific tasks and assignments as well as engaging in facilitated online discussion forums.

In the second year of the program, students will deepen their understanding through a series of specialized courses, applying knowledge and skills to real international surgical care problems. Within their online classroom students will complete comprehensive self-identified research, course specific assignments, participate in facilitated online discussion, and ground their learning in a field practicum. All courses are required components for program completion. Please see Appendix A for additional information on course components.

#### **2.1.1 Target Learners**

1. Surgical care clinicians, trainees in surgical care disciplines, allied health professionals or trainees involved, or who wish to be involved, in global surgical care programs
2. Students who have successfully completed any of the SURG courses or the Graduate Certificate in Global Surgical Care and want to complete the Masters
3. Students who already have a Masters degree in a related field who are interested in incorporating international surgery into their careers

#### **2.1.2 Program Completion Time**

Anticipated time for completion of the program is 2 years of full-time academic study; as a professional program we expect and will accommodate part-time students.

### **2.2 Program Delivery and Schedule**

This 30 credit program delivered synchronously online, through Distance Education (Centre for Teaching, Learning and Technology) offered online through the Connect system, and scheduled throughout the fall and winter terms.

#### **Full-Time**

*Year 1:* SURG 510 (3 credits), SURG 512 (3 credits), SURG 514 (3 credits), SPPH 540 (3 credits), and SPPH 517 (3 credits): Total 15 Credits

*Year 2:* SURG 518 (3 credits), SURG 542 (3 credits), SURG 560 (6 credits) and Electives (3 credits): Total 15 Credits

**Part-Time**

*Year 1:* SURG 510 (3 credits), SURG 512 (3 credits), SPPH 540 (3 credits), and Electives (3 credits):

Total 12 Credits

*Year 2:* SURG 518 (3 credits), SURG 514 (3 credits), and SPPH 517 (3 credits): Total 9 Credits

*Year 3:* SURG 542 (3 credits) and SURG 560 (6 credits): Total 9 Credits

**2.3 Student Admission Criteria**

Applicants must meet minimum entry requirements established by Graduate and Post-Doctoral Studies and (a) hold either an MD or other health-care-related degree; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.

**2.4 Proposed Credential to be awarded**

Master of Global Surgical Care (M.G.S.C.)

**2.5 Faculty Offering Program**

The program will be offered and delivered by the Faculty of Medicine, UBC.

**2.6 Anticipated Start Date**

The program will be offered initially in the 2017/2018 academic year, beginning in September 2017.

**2.7 Related Programs at UBC or other BC Post-secondary Institutions**

A Graduate Certificate in Global Surgical Care (GCGSC) is currently offered by the Branch for International Surgical Care at UBC. This Graduate Certificate is comprised of SURG courses developed from 2009 to 2014 and will ladder into the Masters program (Appendix D). There are no other related programs in BC.

**2.8 Contact Information:**

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### 3. UBC Curriculum Proposal Form

#### 3.1 New Program Proposal: MGSC

#### THE UNIVERSITY OF BRITISH COLUMBIA

### UBC Curriculum Proposal Form

#### Category: (1)

<b>Faculty:</b> Medicine <b>Schools:</b> Surgery <b>Faculty Approval Date:</b> Nov 23, 2016 <b>Effective Session:</b> Winter <b>Year:</b> 2017W	<b>Date:</b> TBD <b>Contact Person:</b> Dr. Brian D. Westerberg <b>Phone:</b> 604-875-5372 <b>Email:</b> BWesterberg@providencehealth.bc.ca surgery.international@ubc.ca
<b>Proposed Calendar Entry:</b>  Masters of Global Surgical Care  Program Overview  The Masters of Global Surgical Care (MGSC) is a program within the Faculty of Medicine.  This online two-year, 30 credit specialized program is designed to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.  The program provides a strong foundation for present and future global surgical care professionals by developing knowledge and skills in the interpretation and use of published experience and research, balanced with applied learning in low resource settings.  A blended model of practicum based learning and on-line teaching methods facilitate the participation of candidates from across Canada and around the world.  <b>Admission Requirements</b>  <b>Candidates must meet <a href="#">minimum admission requirements</a> established by the Faculty of Graduate and Post-Doctoral Studies.</b> <b>Applicants should: (a) hold a health-care-</b>	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,209,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,209,0,0</a>  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new master's program in Global Surgical Care  <b>Rationale:</b>  The creation of this program has been driven, in part, to address an unfilled educational need presented by rapidly growing interest in academic global health programs, in part by a desire to collaborate between the Faculty of Medicine and the School for Population and Public Health and in part to raise UBC's profile and to attract students (both within Canada and abroad), and to collaborate internationally.  Surgical care clinicians, residents in training and health professionals from many disciplines wish to incorporate international surgical care into their careers. They are pursuing training and experiences that will prepare them to make effective contributions in addressing the surgical care problems of low resource settings globally. Global surgical care delivery projects, international partnerships focused on surgical care education and research and global disasters requiring a surgical care response all highlight



related degree such as Doctor of Medicine (MD), Nursing (BSN), Midwifery (BMW) etc.; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.

For complete application and admission information please see the MGSC program's [website](#).

Applicants who do not meet the academic requirements stated above, but who have had other significant formal training, relevant professional experience, and/or otherwise possess demonstrable knowledge or expertise that would prepare them adequately for successful study in the graduate program, may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of Graduate and Postdoctoral Studies.

Applicants from a university outside Canada in which English is not the primary language of instruction must present evidence of English language proficiency prior to being extended an offer of admission. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding English Language Proficiency Requirements. Applicants who do not meet English language proficiency requirements may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of Graduate and Postdoctoral Studies.

### Transfer Credit

The transfer credit policy is outlined by the Faculty of Graduate and Postdoctoral Studies. For more information, refer to the Faculty of Graduate and Postdoctoral

the opportunities for physicians to help. Unfortunately, these opportunities also prompt unease at often being asked to provide surgical and other services for which they are ill-equipped and that may impose approaches to care that, while well-intentioned, are inappropriate. This master's program bridges that gap and meets the learning needs of this growing cadre of students. Currently, there are no accredited graduate-level degree programs available to this cadre that focus on surgical care issues and this proposed master's program would be unique in the world.

In 2015, the Branch for International Surgical Care launched the first-ever online graduate certificate program focusing on International Surgery. This Graduate Certificate in Global Surgical Care (GCGSC) is comprised of SURG courses developed from 2009 to 2014 and will ladder into the master's program. Graduates of SURG courses as well as surgery-related clinicians and residents across Canada and abroad have expressed a strong desire for additional courses that will lead to a master's program in international surgical care. This conclusion was reinforced in an independent study by a masters student of the Sauder School of Business examining the development of a masters program in global surgical care.

These courses are delivered entirely online, are extremely innovative and contribute to UBC's strategic goal of strengthening its presence as a globally influential university and its reputation as an international leader in health education, research and community service.

The Canadian Low Resource Settings Stream will not be listed on the transcript

**Studies' entry in the Academic Calendar regarding Transfer Credits.**

**Program Requirements**

Students will be required to complete 30 credits of SURG and SPPH courses which include a 6 credit Global Surgical Care Field Practicum.

1. SURG 510 (3)
2. SURG 512 (3)
3. SURG 514 (3)
4. SPPH 540 (3)
5. SPPH 517 (3)
6. SURG 518 (3)
7. SURG 542 (3)
8. SURG 560 (6)
9. Electives (3) Approved by the Program Director

**Canadian Low Resource Settings Stream**

The MGSC Canadian Low Resource Settings Stream is an interdisciplinary specialized stream. Students can choose to complete the MGSC with an intense focus on the unique issues affecting surgical care in rural and remote low resource settings in Canada.

In order to complete the MGSC Canadian Low Resource Settings Stream, students must declare their interest in completing the stream to the Program Director upon entry into the program and must complete the following requirements:

- (1) SURG 560(6) – Global Surgical Care Field Practicum must be completed in Canada
- (2) SURG 542(3) – Topic selected for Directed Study in Global Surgical Care must be closely connected to Canada and approved by the Program Director as an appropriate topic for the Canadian Low Resource Settings Stream

Satisfactory progress as defined by the Faculty of Graduate and Postdoctoral Studies for

<p>Master's students must be maintained. Students must complete their requirements within 5 years of starting the program. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding <a href="#">Academic Progress</a>.</p>	
<p><b>Proposed Calendar Entry:</b></p> <p>SURG 518 (3) Surgical Care in Canada's Rural and Remote Indigenous Communities with Global Comparisons</p> <p>Online Course. Critiques the current and historical provision of surgical care services to indigenous communities in Canada and globally. Examines challenges and opportunities confronting both the clinician and the service delivery system, embracing lessons learned from these communities.</p> <p><i>This course is not eligible for Credit/D/Fail grading. Prerequisite: SURG 510</i></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b>  The recent influential publication of the Lancet Commission on Global Surgery includes the statement that underserved communities in high income countries constitute a neglected area; the recent United Nations Declaration of the Rights of Indigenous Peoples includes health care rights; the recent Canadian Summit on Surgical Care in Rural Regions of Canada makes special mention of the underserved indigenous communities. After a long history of objection the Canadian Federal Government has announced its acceptance of the United Nations Declaration of the Rights of Indigenous Peoples in May 2016. These high-level conclusions highlight the need to address this important topic, yet no academic courses which address these issues exist to date. This course will provide the background knowledge and discussion format for clinicians and policy makers to both understand the complexity and seek solutions in this neglected surgical care area. By offering this unique course, UBC will be seen as a leader in responding to both national and international concern. It also draws on indigenous voices and will have synergy with UBC's Centre for Indigenous Health. The course will promote critical thinking on, and ultimately will improve, the provision of surgical care services to remote indigenous communities in Canada and abroad.</p>

<p><b>Proposed Calendar Entry:</b></p> <p>SURG 542 (3) Directed Study in Global Surgical Care</p> <p>Online course. Literature review of a global surgical care topic chosen in consultation with an advisor. Includes analysis of existing literature and research, and identification of gaps in current knowledge.</p> <p><i>This course is not eligible for Credit/D/Fail grading. Prerequisite: SURG 510, 512, and 514</i></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b>  Global Surgical Care, although practiced for centuries, is only recently an emerging discipline within Global Health. Therefore, the body of published literature on any given surgical care topic, although increasing rapidly, is scattered and not well known, handicapping global surgical care professionals. Such professionals represent a number of sub-disciplines within surgical care (e.g. surgery, anaesthesia, obstetrics, nursing, rehabilitation, surgical project administration, etc.). This course will provide opportunity for the student to carry out an exhaustive search of the world literature, both of the mainstream resources and also of the “grey” literature (e.g. masters theses, conference presentations, major NGO reports) on a global surgical care topic within the student’s own sub-discipline, to present an analysis of the literature and to postulate the need and direction for future publications. Such activity will not only promote knowledge acquisition and critical thinking for the student but will contribute significantly to the education of peers and to UBC’s Global Surgical Care knowledge repository.</p>
<p><b>Proposed Calendar Entry:</b></p> <p>SURG 560 (6) Global Surgical Care Field Practicum</p> <p>Online Course with a four to eight week on-site field placement. Proposal development, implementation and high-level written report of a surgical care field practicum in an underserved location globally, producing practical “on-the-ground” skills</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SURG</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create new course</p> <p><b>Rationale for Proposed Change:</b>  This course is the field experience of the MGSC</p>

<p><i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><i>Prerequisite:</i> SURG 510, 512, 514, and SPPH 540</p>	<p>program. Because the Masters is a professional degree based on course content, this course will provide opportunity for “grounding” of the knowledge and skills attained in the other courses of the program. It will enable students to synthesize the knowledge gained from the coursework, transfer their knowledge to one aspect of International Surgical Care practice, and demonstrate achievement of the Masters program objectives. Also, the written report could well provide the basis for a publication or for a major conference presentation.</p>
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### 3.2 Change to Program: GCGSC

## THE UNIVERSITY OF BRITISH COLUMBIA

## UBC Curriculum Proposal Form Change to Course or Program

**Category: (2)**

<b>Faculty:</b> Medicine <b>Schools:</b> Surgery <b>Faculty Approval Date:</b> Nov 23, 2016 <b>Effective Session:</b> Winter <b>Year:</b> 2017W	<b>Date:</b> TBD <b>Contact Person:</b> Dr. Brian D. Westerberg <b>Phone:</b> 604-875-5372 <b>Email:</b> BWesterberg@providencehealth.bc.ca surgery.international@ubc.ca
<b>Proposed Calendar Entry:</b> (40 word limit for course descriptions)  Graduate Certificate in Global Surgical Care This is an online program that aims to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,209,965,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,209,965,0</a>  <b>Present Calendar Entry:</b>  <b>Graduate Certificate in Global Surgical Care</b> This is an online program that aims to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.
<u><b>Admission Requirements</b></u>  <u>Candidates must meet minimum admission requirements established by the Faculty of Graduate and Post-Doctoral Studies.</u> <u>Applicants should: (a) hold a health-care-related degree such as Doctor of Medicine (MD), Nursing (BSN), Midwifery (BMW) etc.; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.</u>  <u>For complete application and admission information please see the MGSC program's website.</u>  <u>Applicants who do not meet the academic requirements stated above, but who have had other significant formal training, relevant professional experience, and/or otherwise possess demonstrable knowledge or expertise that would prepare them adequately for</u>	<u><b>Admission</b></u> <del>Criteria for admission to the certificate program will be the same as those required for admission to Master's programs at UBC, as outlined by the Faculty of Graduate and Postdoctoral Studies.</del> For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Master's Admissions. <del>For complete application information please see the certificate program's website.</del> This program is intended for surgical care clinicians, trainees in surgical care disciplines, allied health professionals or trainees involved, or who wish to be involved, in global surgical care programs.
<b>Certificate Requirements</b> All students must complete the following four courses (12 credits): SURG 510 (3); SURG 512 (3); SURG 514 (3); SPPH 540 (3). Satisfactory progress as defined by the Faculty of Graduate and Postdoctoral	

successful study in the graduate program, may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of Graduate and Postdoctoral Studies.

Applicants from a university outside Canada in which English is not the primary language of instruction must present evidence of English language proficiency prior to being extended an offer of admission. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding English Language Proficiency Requirements. Applicants who do not meet English language proficiency requirements may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of Graduate and Postdoctoral Studies.

For complete application information please see the certificate program's website.

#### Admission Requirements

Candidates must meet minimum entry requirements established by Graduate and Post-Doctoral Studies. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Master's Admissions.

Applicants must: (a) hold either an MD or other health-care-related degree; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.

Studies for Master's students must be maintained. Students must complete their requirements within ~~4~~ years of starting the program. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Academic Progress.

#### **Type of Action:**

Change the Graduate Certificate in Global Surgical Care admission requirements.

#### **Rationale for Proposed Change:**

This change will allow students to ladder the Graduate Certificate in Global Surgical Care into the proposed Master of Global Surgical Care.

Applicants from a university outside Canada in which English is not the primary language of instruction must present evidence of English language proficiency prior to being extended an offer of admission. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding [English Language Proficiency Requirements](#).

Applicants who do not meet both the academic and English language proficiency requirements stated above, but who have had other significant formal training, relevant professional experience, and/or otherwise possess demonstrable knowledge or expertise that would prepare them adequately for successful study in the graduate program, may be granted admission on the recommendation of the Director of the Branch for International Surgical Care and the approval of the Dean of the Faculty of Medicine.

For complete application information please see the certificate program's [website](#).

### **Certificate Requirements**

All students must complete the following four courses (12 credits): SURG 510 (3); SURG 512 (3); SURG 514 (3); SPPH 540 (3). Satisfactory progress as defined by the Faculty of Graduate and Postdoctoral Studies for Master's students must be maintained. Students must complete their requirements within **5** years of starting the program. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding [Academic Progress](#).



## 4. New Course Syllabi

### 4.1 New Course Syllabus: SURG 518

#### **SURG 518:**

#### **Surgical Care in Canada's Rural and Remote Indigenous Communities with Global Comparisons (3 credits)**

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##### ***Course Syllabus***

**Overview:** This on-line course critiques the current and historical provision of surgical care services to rural and remote indigenous communities in Canada and in other higher income countries. It examines the challenges and opportunities confronting both the clinician and the service delivery system, embracing lessons learned from these communities. It provides a graduate level understanding of the issues involved and prepares the course participants for leadership both in surgical care delivery systems and in advocacy for addressing care disparities.

##### **Objectives of Course:**

*Upon completion of this course, the learner will:*

- *Have an in-depth understanding of why surgical care delivery to underserved communities in high income countries integrates with the larger discipline of global surgical care*
- *Comprehend and be able to critique some of the historical reasons influencing the health status indicators, particularly those relating to surgical care, in indigenous communities of Canada*
- *Be able to discuss how Canada's surgical care delivery to its indigenous communities compares with that in other high and middle income countries, in light of the United Nations Declaration on the Rights of Indigenous Peoples*
- *Have an understanding, gained from listening to the voices of indigenous individuals with surgical care needs living in remote communities, of their unique social circumstances that influence health care*
- *Be able to articulate and defend strategies to address the disparities in surgical care between remote indigenous communities and mainstream urban communities in the Canadian setting*
- *Through reflection and debate, be able to compare surgical care delivery to underserved communities in high income countries with that in low income countries and be able to determine the applicability of lessons learned from one income setting to the other*

##### **Description:**

This course is fully on-line. It is delivered over one semester through a series of weekly modules involving didactic content, essential readings from the literature and threaded topic discussions with instructors and other student participants. It will introduce new information and reflection as well as draw on the students' experience in the larger domain of surgical care to underserved settings globally. All required course material is given on line and there is no need for other textbooks. Student assessment is by on line submitted assignments as well as by course participation through the threaded discussions.

**Pre-requisite Course:** SURG 510

**Course Modules:****Module 1. “Underserved communities in High Income Countries”****Objectives:**

*After completing Module 1, you will be able to:*

- *Discuss the various categories comprised by the term “underserved communities” with respect to global surgical care*
- *Articulate the similarities and differences between “underserved communities” in high income countries and in low income countries*
- *Discuss the reality of underserved communities in Canada and compare this situation with that in other high and upper-middle income countries*
- *Outline and explain the health care status, emphasizing surgical care, of Canada’s remote indigenous communities and discuss some of the historical factors influencing this status*

**Module 2. “International Consensus”****Objectives:**

*After completing Module 2, you will be able to:*

- *Describe and discuss the background of how the United Nations Declaration of the Rights of Indigenous Peoples came about*
- *Outline and explain the Declaration articles that relate specifically to health care*
- *Discuss and critique Canada’s policy on surgical care delivery to indigenous communities*
- *Understand in-depth, by hearing the voices of indigenous individuals living in communities and with surgical care needs, the disparities in care delivery between such communities and mainstream urban communities in Canada*

**Module 3. “Human Resource Issues”****Objectives:**

*After completing Module 3, you will be able to:*

- *Outline and discuss the human resource challenges in surgical care delivery to remote indigenous communities*
- *Critique various creative ideas in addressing the human resource challenges*
- *Explain the role of the “surgeon” in traditional indigenous thought and present how this might influence surgical care interactions*
- *Postulate an integration of the Canadian Royal College CANMEDS roles with indigenous health values and principles and hypothesize how such an integration might contribute to improvement of surgical care in remote indigenous communities*

**Module 4. “Indicator Surgical Care Profiles”****Objectives:**

*After completing Module 4, you will be able to:*

- *Describe and discuss how trauma care, maternal care, cancer care and disability care are all revealing indicators of overall surgical care in remote indigenous communities*
- *Explain, in cultural context, how the ‘health seeking resort’ active in remote indigenous communities influences surgical care*

**Module 5. “National Barriers”****Objectives:**

*After completing Module 5, you will be able to:*

- *Outline and discuss the barriers to surgical care in remote indigenous communities that are inherent in the health care system itself*
- *Critique the recommendations of the 2015 Joint Position Paper (of the Society of Rural Physicians of Canada, the Canadian Association of General Surgeons, the Society of Gynecologists/Obstetricians of Canada) as to their relevance to underserved remote indigenous communities*
- *Debate the pros versus cons of channeling international medical graduates (IMG's) to fill the need of Canada's underserved communities*
- *Postulate benefits of emerging public/private health care initiatives to underserved communities*

**Module 6. “Models of Improved Care”****Objectives:**

*After completing Module 6, you will be able to:*

- *Describe, compare and critique a number of current and proposed models for improving surgical care to underserved indigenous communities both in Canada and in other countries*

**Module 7. “Disaster Preparedness in Canada’s Remote Communities”****Objectives:**

*After completing Module 7, you will be able to:*

- *Describe and explain the concept of “twice burdened” for remote communities which are subject to major disasters*
- *Discuss the application of the principles of ‘disaster readiness’ to the Canadian situation of remote communities*
- *Outline social resilience in the context of remote indigenous communities and defend its importance in managing disaster readiness, response and recovery*

**Module 8. “Global Surgical Care and Canada’s Indigenous Communities – A two-way learning journey”****Objectives:**

*After completing Module 8, you will be able to:*

- *Reflect on and present innovative thinking as to how lessons learned from global surgical care can be applied to the Canadian setting of underserved remote indigenous communities and, equally important, how lessons learned from surgical care in remote indigenous communities in Canada can be applied to global surgical care*
- *Postulate and defend concrete ideas for advocacy directed at Canadian decision makers for improving surgical care in remote indigenous communities*

**Assessment**

(Done in an on line format)

Participation in weekly threaded discussions - 30 %

Submission of first written assignment (mid semester) - 30 %

*Based on the learning from the course thus far, this assignment will be a 3000 word reflection*

*essay, with suggested headings, in response to a given Case Scenario of unmet surgical care need in a remote indigenous community.*

Submission of second written assignment (end semester) - 40 %

*Drawing on learning from the entire course, the student will choose a particular remote indigenous community (encountered either from personal experience or from reading) and will present a paper*

(3000 to 4000 words) outlining strategies at local, national and international levels needed to address and improve surgical care in that community.

### Schedule of course

Weeks 1 & 2	Module 1
Week 3	Module 2
Week 4	Module 3
Week 5	Module 4
Week 6	(Reading week)
Week 7	Assignment 1
Week 8	Module 5
Week 9	Module 6
Week 10	Module 7
Week 11	Module 8
Week 12	Assignment 2

### List of Essential and Optional Readings (UBC Library support)

1. Doty B, Zucherman R, Finlayson S, et al. May 2008. General surgery at rural hospitals: a national survey of rural hospital administrators. *Surgery* 143(5):599-606  
<http://www.sciencedirect.com/science/article/pii/S0039606008001128>
2. Humber N, Frecker T. 2008. Rural Surgery in British Columbia: Is anybody out there? *Can J Surg* 51(3):179-184  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2496604/>
3. Canadian Association of Emergency Medicine. The Management of Rural, Remote and Isolated Emergency Health care Facilities in Canada: Recommendations and Discussion  
<http://caep.ca/resources/position-statements-and-guidelines/recommendations-management-rural-remote-and-isolated--5>  
(Among other discussion, note the definitions of “rural”, “rural remote”, “rural isolated”, etc)
4. Rural Surgery: Challenges and Solutions for the Rural Surgeon. Ed. Wichman M, Borgstrom D, Caron N, Madden G. 2011. *Rural Surgery* Chapter 3. Springer Books  
<https://books.google.ca/books?isbn=3540786805>
5. Kornelsen J, Iglesias S, Humber N, Caron N, Grzybowski S. The experience of GP Surgeons in Western Canada: The influence of interprofessional relationships in training and practice. March 2013. *Journal of Interprofessional Practice and Education*, vol 3.1:43-61 ([www.jripe.org](http://www.jripe.org))  
[www.jripe.org/index.php/journal/article/download/75/76](http://www.jripe.org/index.php/journal/article/download/75/76)

6. Statement of the Royal College of Physicians and Surgeons of Canada. Prepared by the Indigenous Health Advisory Committee and the Office of Health Policy and Communications. July 4, 2013. Indigenous Health Values and Principles.

[http://www.royalcollege.ca/portal/page/portal/rc/common/documents/policy/indigenous\\_health\\_values\\_principles\\_report\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/policy/indigenous_health_values_principles_report_e.pdf)

(Note the integration of this discussion with the CANMEDS roles)

7. Caron N, Mackie J, Varley L, Ward C, Adams E. 2015 March/April. Cultural competency – Canada's history and today's physician. College of Physicians and Surgeons of British Columbia, *The College Connector* v.3 (2)

<https://www.cpsbc.ca/for-physicians/college-connector/2015-V03-02/06>

8. Gruen RL, Tesimale L, Kong K, et al. The surgical care of Indigenous Australians : A structured orientation program. November 2007. *Australia New Zealand Journal of Surgery* 77 (11):925-929.

9. Karmali S, Laupland K, Harrop AR, et al. 2005. Epidemiology of severe trauma among status Aboriginal Canadians: a population-based study. *CMAJ* 172 (8):1008-1011

10. United Nations Declaration on the Rights of Indigenous People. 2007

[http://www.un.org/esa/socdev/unpfii/documents/DRIPS\\_en.pdf](http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf)

11. Dare A, Grimes C, Gilles R, et al. 2015. Global surgery: Defining an emerging global health field. *Lancet*: 384:2245-47

12. Iglesias S, et al. 2015. Joint position paper on rural surgery and operative delivery. *Can J Rural Medicine* 2015, 20(4):129-138.

13. Patricia C Valery , Michael Coory , Janelle Stirling and Adèle C Green. Cancer diagnosis, treatment, and survival in Indigenous and non-Indigenous Australians: a matched cohort study. *The Lancet* 2006; 367:1842-1848

14. Corrine Riddell, Jennifer A Hutcheon, and Leanne S Dahlgren. (Gaps in obstetrical care for First Nations women in BC). *Canadian Medical Association Journal (CMAJ)*, Nov 2015

15. [https://books.google.ca/books?hl=en&lr=&id=O-jBWP\\_HgT8C&oi=fnd&pg=PP1&dq=indigenous+health+in+canada&ots=xWuGpWVOnQ&sig=oXsNaJr8ruF-RZpK\\_5TkzmgGxFk#v=onepage&q=indigenous%20health%20in%20canada&f=false](https://books.google.ca/books?hl=en&lr=&id=O-jBWP_HgT8C&oi=fnd&pg=PP1&dq=indigenous+health+in+canada&ots=xWuGpWVOnQ&sig=oXsNaJr8ruF-RZpK_5TkzmgGxFk#v=onepage&q=indigenous%20health%20in%20canada&f=false)

Scholarly Book on Aboriginal Health in Canada, 2<sup>nd</sup> Ed. James Waldram, D Ann Herring, t Kue Young. University of Toronto Press

16. <http://www.socialjustice.org/index.php?page=aboriginal-issues>

Overview of Aboriginal issues from Centre for Social Justice.

17. <http://ipac-amic.org/wp-content/uploads/2011/10/02-IPAC-RCPSC-CME-DOC.pdf>

First Nations, Inuit, Metis Health – Core Competencies

Curriculum framework for CME

By: Indigenous Physicians Association of Canada and the Royal College

[NB. This paper will need to figure in the course!! It can be part of the background health overview before moving into surgical care issues. i.e. The course will need this approach of focusing on surgical care issues but within a well-overviewed health care perspective]

<https://www.afmc.ca/pdf/CoreCompetenciesEng.pdf> This may be the new alternate site for this article. i.e. I had trouble accessing the first URL. I am not sure that it is the same article.

18. <http://ipac-amic.org/who-we-are>

Website of the Indigenous Physicians Association of Canada  
General information about the Association

19. Theo Vos, Bridget Barker, Stephen Begg, Lucy Stanley and Alan D Lopez. Burden of disease and injury in Aboriginal and Torres Strait Islander Peoples: the Indigenous health gap. *International Journal of Epidemiology*, 38,(2): 470 – 477. 2009

20. Gruen, Russell L; Tesimale, Louisa; Kong, Kelvin; more... [THE SURGICAL CARE OF INDIGENOUS AUSTRALIANS: A STRUCTURED ORIENTATION PROGRAMME](#) . *ANZ Journal of Surgery*, Volume 77, Issue 11: pages 925-929, 2007.

21. Aramoana, Jaclyn; Alley, Patrick; Koea, Jonathan B. [Developing an Indigenous Surgical Workforce for Australasia](#). *ANZ Journal of Surgery*, Volume 83, Issue 12: 912-917, 2013.

22. Ishak M. [Differences in the surgical admissions to hospital between the indigenous and non-indigenous populations of Australia](#). *ANZ Journal of Surgery*, Volume 73, Issue 4: 200-204, 2003.

23. Hall, SE; Bulsara, CE; Bulsara, MK; more... [Treatment patterns for cancer in Western Australia: does being Indigenous make a difference?](#) *MEDICAL JOURNAL OF AUSTRALIA*, Volume 181, Issue 4: 191-194, 2004.

24. Signal, Virginia; Sarfati, Diana; Cunningham, Ruth; more... [Indigenous inequities in the presentation and management of stomach cancer in New Zealand: a country with universal health care coverage](#). *Gastric Cancer*, Volume 18, Issue 3: 571-79, 2015

25. Moore, SP; Green, AC; Bray, F; more... [Survival disparities in Australia: an analysis of patterns of care and comorbidities among indigenous and non-indigenous cancer patients](#). *BMC CANCER*, Volume 14: 517-526, 2014.

26. Plani, Frank; Carson, Phil. [The challenges of developing a trauma system for Indigenous people](#). *Injury*, Volume 39: S43-S53, 2008.

27. See Book "Disease Control Priorities in Developing Countries" Chapter 65 "The District Hospital" in its own file. Jamison DT, Breman JG et al, 2008.

28. [https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/canmetenergy/files/pubs/2013-118\\_en.pdf](https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/canmetenergy/files/pubs/2013-118_en.pdf)  
Status of remote "off-grid" communities in Canada. August 2011. Government of Canada

29. [http://www.phac-aspc.gc.ca/alert-alerte/h1n1/guidance\\_lignesdirectrices/cdrisp-cdeicp-eng.php](http://www.phac-aspc.gc.ca/alert-alerte/h1n1/guidance_lignesdirectrices/cdrisp-cdeicp-eng.php)  
Remote Isolated Task Group definition. Government of Canada. 2009

30. [http://www.cprn.org/documents/45652\\_en.pdf](http://www.cprn.org/documents/45652_en.pdf)

Frontline Healthcare in Canada: Innovations in delivering services to vulnerable populations. 2006

31. <https://www.culturalsurvival.org/who-are-indigenous-peoples>

Who are indigenous peoples?

32. Josée G. Lavoie, Evelyn L. Forget, Annette J. Browne. Caught at the Crossroad: First Nations, Health Care, and the Legacy of the Indian Act. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health* 8(1) 2010.

33. Brenda L. Cameron, Maria del Pilar Carmargo Plazas, Anna Santos Salas, R. Lisa Bourque Bearskin, Krista Hungler. Understanding Inequalities in Access to Health Care Services for Aboriginal People: A Call for Nursing Action. *Advances in Nursing Science* Vol. 37, No. 3, pp. E1–E16. 2014

34. [http://www.nccah-ccnsa.ca/docs/fact%20sheets/social%20determinates/Access%20to%20Health%20Services\\_Eng%202010.pdf](http://www.nccah-ccnsa.ca/docs/fact%20sheets/social%20determinates/Access%20to%20Health%20Services_Eng%202010.pdf)

Access to health services as a social determinant of First Nations, Inuit and Métis health. National Collaborative Centre for Aboriginal Health.

35. Tim Michiel Oosterveer, T Kue Young. Primary health care accessibility challenges in remote indigenous communities in Canada's North. *International Journal of Circumpolar Health*. 2015; 74: 10.3402/ijch.v74.29576.

36. [Karen E. Yeates](#), [Alan Cass](#), [Thomas D. Sequist](#), [Stephen P. McDonald](#), [Meg J. Jardine](#), [Lilyanna Trpeski](#), [John Z. Ayanian](#). Indigenous people in Australia, Canada, New Zealand and the United States are less likely to receive renal transplantation. *Kidney International Volume 76, Issue 6*, Pages 659–6642. September 2009 <http://www.sciencedirect.com/science/article/pii/S0085253815540295>

37. Peter Bjerregaard, T Kue Young, Eric Dewailly, Sven OE Ebbesson. Indigenous health in the Arctic: an overview of the circumpolar Inuit population. *Scand J Public Health* 2004; 32: 390–395.

38. SOGC Policy Statement. Returning Birth to Aboriginal, Rural, and Remote Communities. *J Obstet Gynaecol Can* 2010;32(12):1186–1188.

39. Baiju R. Shah, Nadia Gunraj, and Janet E. Hux. Markers of Access to and Quality of Primary Care for Aboriginal People in Ontario, Canada. *American Journal of Public Health*: May 2003, Vol. 93, No. 5, pp. 798-802. doi: 10.2105/AJPH.93.5.798

40. Kornelsen, Jude; Grzybowski, Stefan; Iglesias, Stuart. Is rural maternity care sustainable without general practitioner surgeons? *Canadian Journal of Rural Medicine* 11.3 (Summer 2006): 218-20.

41. <http://publications.gc.ca/Collection-R/LoPBdP/BP/prb0245-e.htm>

Rural Canada: access to health care. Large number of Canadian Health Statistics, re rural communities. Including proposed strategies and solutions. 2002.

42. John Newton. An assessment of coping with environmental hazards in northern aboriginal communities. *The Canadian Geographer / Le Géographe canadien* Volume 39, Issue 2, pages 112–120, June 1995.

43. <https://www.fcm.ca/Documents/reports/FCM-NorthernRemote.pdf>

Strong northern and remote communities. Federation of Canadian Municipalities. (Section on Public Safety and Emergency Preparedness. 2016.

44. [http://gordonfoundation.ca/sites/default/files/publications/Emergency%20Preparedness%20in%20Canadas%20Arctic%20B%20Funston 2.pdf](http://gordonfoundation.ca/sites/default/files/publications/Emergency%20Preparedness%20in%20Canadas%20Arctic%20B%20Funston%202.pdf)

Emergency preparedness in Canada's North: an examination of community capacity. Bernard Funston, Northern Canada Consulting. 2013.

45. [http://publications.gc.ca/collections/collection\\_2016/rddc-drhc/D68-3-030-2013-eng.pdf](http://publications.gc.ca/collections/collection_2016/rddc-drhc/D68-3-030-2013-eng.pdf)

Building Resilience and Rural Health System Capability for Pre-Disaster Planning and Preparedness. Justice Institute of British Columbia. 2013.

46. <http://www.redcross.ca/how-we-help/emergencies-and-disasters-in-canada/for-first-nations--metis-and-inuit-communities>

Canadian Red Cross. Emergency preparedness helps – for Indigenous communities.

### **Academic Honesty and Standards**

Academic honesty is essential to the continued functioning of the University of British Columbia as an institution of higher learning and research. All UBC students are expected to behave as honest and responsible members of an academic community. Breach of those expectations or failure to follow the appropriate policies, principles, rules, and guidelines of the University with respect to academic honesty may result in disciplinary action.

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## 4.2 New Course Syllabus: SURG 542

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### SURG 542: Directed Study in Global Surgical Care (3 credits)

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#### *Course Syllabus*

#### **Overview:**

SURG 542 is a fully online graduate-level Directed Study course; students will research a topic within the field of Global Surgical Care under the direction of a Faculty Advisor. The course is delivered over one semester for credit towards a Masters of Global Surgical Care (MGSC).

This Directed Study course is a comprehensive learning experience in a relevant area of study in global surgery initiated by the MGSC student in consultation with a Faculty Advisor. This practical course is intended to build upon knowledge brought forward from the prerequisite courses within the MGSC through exploration and application of skills in each student's chosen field of study. Research objectives applicable to low-resource surgical care settings are chosen by students. An example would include researching and proposing solutions to real surgical care problems inherent to a low-resource setting.

**Prerequisites:** The Directed Study in Global Surgical Care will commence after the first year of the program has been completed, including SURG 510, SURG 512, and SURG 514.

#### **Objectives of Course:**

*At the conclusion of this course students will be able to:*

- Identify impediments in providing patients in a low-resource setting the required surgical care;
- Analyze the reasons behind and the relevant factors contributing to the impediment;
- Collaborate with colleagues locally, nationally and internationally to coordinate efficient solutions to identified impediments in provision of surgical care to patients in low-resource settings;
- Establish a framework to work within to develop creative and/or novel solutions to improve surgical care provision to patients in low-resource settings.
- Acquire additional knowledge in a learner's chosen discipline or field of specialization in the area of global surgical care provision;
- Demonstrate self-directed and life-long learning education skills in the field of provision of surgical care in low-resource settings;

#### **Description:**

This course is delivered online. This course is delivered over one semester through a Directed Study which enables learners to research and reflect upon problems and solutions applicable to Global Surgical Care in low-resource settings. The Directed Study will consist of 4 components: Part I is the development of a Research Plan; Part II is a comprehensive literature review in consultation with a Faculty Advisor; Part III consists of write up and presentation of results and; Part IV is reflection on what was learned and identification of areas for further learning. Part I must obtain Faculty Advisor's approval prior to progressing to Parts II, III, and IV. Coursework is largely carried out independently; however, learners will receive guidance through discussion of research challenges and obtain feedback from their Faculty Advisor throughout the course.

**Assessment:**

(Submitted online format)

**Directed Study**

Part I: Research Plan (end –week 3)

-20%

*Research Plans will be based on the approved Learning Contract. Students will identify their research objectives based on their specialty and interest, they will formulate a Research Plan in consultation with their Faculty Advisor. The plan will be five pages in length (double spaced), with a minimum of 20 academic references. Students must obtain and include any necessary Research and Ethics approval.*

Part II: Research Log (end – week 8)

-10%

*Demonstrating the 'Directed Study' requirement of this course, students will perform a thorough review of the appropriate literature in their identified area of study under the guidance of their Faculty Advisor. They may also consult with "experts" in their chosen field of study to glean additional information and/or insight into the chosen clinical problem. Students will arrange to meet with their Faculty Advisor online for consultation, not less than one hour biweekly (week 1-8) and keep a log. The Research Log will be two pages in length (double spaced) with a minimum of four entries.*

Part III: Final Paper (end – week 11)

-60%

*Drawing on learning from the entire course students will present a 20 page (double spaced) paper for evaluation. The Research Paper will summarize the course objectives, methods, and results based on the approved Research Plan and Learning contract. It will include an in-depth discussion of the application of findings with particular attention to areas of future study required, and will be written in a publishable format.*

Part IV: Reflection Exercise (end – week 12)

-10%

*Based on their overall learning experience students will submit a two page (double spaced) reflection document. The learner will outline the course objectives, whether or not they were accomplished, lessons learnt with a reflection on how this knowledge can be applied to future research endeavors in low-resource settings.*

**Schedule of course:**

Week 1-3	Research Plan	Directed Study Part I
Week 4-8	Research Log	Directed Study Part II
Week 9-11	Final Paper	Directed Study Part III

Week 12	Reflection Exercise	Directed Study Part IV
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**Evaluation:**

Directed Studies are evaluated on a **pass/fail** basis in accordance with the following judgment scale. A grade of satisfactory and a numeric score of 70% or greater will meet requirements for credit.

- Unsatisfactory - <65%
- Needs Improvement – 65–70%
- Meets Expectations – 70-80 % (Satisfactory)
- Exceeds Expectations - >80% (Outstanding)

In determining a Grade, the following will be considered:

- Breadth of Literature Review
- Depth of knowledge of topic
- Research innovation
- Quality of Research and Methods of Implementation
- Conclusions and Outcomes
- Potential Enhancement of Provision of Surgical care
- Impacts on learning and quality of research analysis
- Quality of written report
- Reflection of impact on learner

***Suggested Reading List:***

*There is no required textbook. The online learning platform will have links to the following on-line readings provided for general information as a starting point for students. Further reading lists will be individualized based on student interest and proposed research:*

The Lancet Commission on Global Surgery. <http://www.lancetglobalsurgery.org> and Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development.

Transforming our World: The 2030 agenda for sustainable development.  
<http://www.sustainabledevelopment.un.org>

Global surgery: defining an emerging global health field. Anna J Dare, Caris E Grimes, Rowan Gillies, Sarah L M Greenberg, Lars Hagander, John G Meara, Andrew J M Leather. Published Online May 20, 2014  
[http://dx.doi.org/10.1016/S0140-6736\(14\)60237-3](http://dx.doi.org/10.1016/S0140-6736(14)60237-3).

Building Surgical Research Capacity in Africa: The Ptolemy Project. Miliard Derbew\*, Massey Beveridge, Andrew Howard, Niall Byrne. PLoS Medicine, July 2006 | Volume 3 | Issue 7 | e305. DOI: 10.1371/journal.pmed.0030305

Guidelines for Surgeons on Establishing Projects in Low-Income Countries. Caris E. Grimes, Jane Maraka, Andrew N. Kingsnorth, Rudolph Darko, Christopher A. Samkange & Robert H. S. Lane. World J Surg DOI 10.1007/s00268-013-1999-4

Essential surgery: key messages from Disease Control Priorities, 3rd edition. Charles N Mock, Peter Donkor, Atul Gawande, Dean T Jamison, Margaret E Kruk, Haile T Debas, for the DCP3 Essential Surgery Author Group\*. The Lancet. Published online February 5, 2015 [http://dx.doi.org/10.1016/S0140-6736\(15\)60091-5](http://dx.doi.org/10.1016/S0140-6736(15)60091-5)

Virtual Mentor: Global Health Ethics at Home and Abroad . American Medical Association Journal of Ethics March 2010, Volume 12, Number 3: 146-148.

Charitable Platforms in Global Surgery: A Systematic Review of their Effectiveness, Cost-Effectiveness, Sustainability, and Role Training. Mark G. Shrime, Ambereen Sleemi, Thulasiraj D. Ravilla. World J Surg (2015) 39:10–20 DOI 10.1007/s00268-014-2516-0

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If an allegation is made against a student, the Registrar may place the student on academic hold until the President has made his or her final decision. When a student is placed on academic hold, the student is blocked from all activity in the Student Service Centre.

### 4.3 New Course Syllabus: SURG 560

#### **SURG 560: Global Surgical Care Field Practicum (6 credits)**

##### ***Course Syllabus***

##### **Overview:**

This online course with a field placement is a core component of the Masters of Global Surgical Care Program (MGSC). The field practicum will be the capstone project which facilitates the 'on-the-ground' development and integration of knowledge and skills gained from the coursework completed during the first year of the MGSC Program. It provides learners with the opportunity for additional practical skill development in their specialties and regions of interest and is designed to help facilitate their transition into independent Global Surgical Care practitioners.

**Prerequisites:** The Global Surgical Care Field Practicum will commence after the first year of the program has been completed, including SURG 510, SURG 512, SURG 514, and SPPH 540

##### **Objectives of Course:**

*At the conclusion of this course students will be able to:*

- Conceptualize and design, at a graduate level, a surgical care project, either in a research or educational development format, for a low resource setting globally
  - Implement and evaluate an approved surgical care project
  - Discuss the importance of host colleague partnerships in global surgical care projects
- Articulate and discuss the barriers to successful global surgical care projects
- Articulate and defend the value of a field practicum to consolidate learning of surgical care in low resource settings globally
  - Prepare and complete a publishable-ready report on a global surgical care project

##### **Description:**

This course is delivered online. It is delivered over two semesters through a student led capstone project which enables learners to synthesize the knowledge gained from prerequisite coursework, transfer their knowledge to one aspect of Global Surgical Care practice, and demonstrate achievement of the MGSC program objectives. The capstone project will consist of 3 components: Part I is the Development of a Project Plan; Part II is the Implementation and Oversight of the project through a field placement and; Part III consists of write up and presentation of results for critical review, of reflection on what you have learned and your identification of areas for further learning. Part I must obtain supervisor's approval prior to progressing to Parts II and III. This project is largely carried out independently; however, learners will receive guidance through discussion of project challenges and obtain feedback from peers and supervisors during the course.

##### **Assessment:**

(Submitted online format)

##### Capstone Project

Part I: Project Plan (end- first semester)

- 30 %

*Project Plans will be based on the approved Practicum Agreement. Students will identify their project objectives based on specialty and region of interest, the Project Plan will be 10-12 pages in length (double spaced), with suggested headings and consultation of a minimum of 20 academic references. Students must obtain and include any necessary Research and Ethics approval.*

Part II: Placement Package (mid – second semester) - 30 %

*Demonstrating the ‘on-the-ground’ requirement of this course, students will work towards their project objectives in a low-resource setting (four to eight weeks). Students will present a package for evaluation which contains the following: Field Supervisors Evaluation and Feedback, weekly field log (four to eight entries), as well as, peer consultations (minimum of two). The Placement Package will be limited to 10 pages in length (double spaced).*

Part III: Final Report (end – second semester) - 40 %

*Drawing on learning from the entire course, the student will present a 20-25 page (double spaced) final report, outlining significant learnings based on the objectives identified in the Project Plan and the approved Practicum Agreement.*

#### **Schedule of course:**

September	Formalize Practicum Agreement	Capstone Project Part I
October - December	Project Plan (Winter break)	Capstone Project Part I
January - February	Field Component (Reading week)	Capstone Project Part II
March - April	Final Report	Capstone Project III

#### **Evaluation:**

Practica are evaluated on a **pass/fail** basis in accordance with the following judgment scale. A grade of satisfactory and a numeric score of 70% or greater will meet requirements for credit.

- Unsatisfactory - <65%
- Needs Improvement – 65–70%
- Meets Expectations – 70-80 % (Satisfactory)
- Exceeds Expectations - >80% (Outstanding)

In determining a Grade, the following will be considered:

- Breadth of Literature Review
- Depth of knowledge of topic
- Project innovation
- Quality of Project and Methods of Implementation
- Conclusions and Outcomes
- Enhancement of Provision of Surgical care at local site
- Impacts on learning and quality of Skill Development
- Quality of written report
- Reflection of impact on learner

### List of Recommended Readings:

1. Joshua S Ng-Kamstra, Sarah L M Greenberg, Fizan Abdullah, et al. Global Surgery 2030: a roadmap for high income country actors. *BMJ Global Health* 2016  
<http://gh.bmj.com/content/1/1/e000011>
2. Emma-Louise Aveling, Desalegn Tegabu Zegeye, Michael Silverman. Obstacles to implementation of an intervention to improve surgical services in an Ethiopian hospital: a qualitative study of an international health partnership project. *BMC Health Services Research* **16**:393. 2016  
<https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-016-1639-4>
3. Vic Neufeld, Donald C. Cole, Alan Boyd, Donald Njelesani, Imelda Bates, Stephen R. Hanney. Perspectives on Evaluating Global Health Research for Development: A Background Paper. *CANADIAN COALITION FOR GLOBAL HEALTH RESEARCH* 27 June 2014  
<http://www.ccgpr.ca/wp-content/uploads/2014/07/EGHR4D-final-paper.pdf>
4. Hollaar G, Taylor RH. Assessing Personal Contributions in Global Surgery – By Whose Yardstick? *Can J Surg* 58(5):343-6, October 2015.
5. World Health Organization. Recommended format for a Research Protocol  
[http://www.who.int/rpc/research\\_ethics/format\\_rp/en/](http://www.who.int/rpc/research_ethics/format_rp/en/)
6. Lawrence C. Loh, William Cherniak, Bradley A. Dreifuss, Matthew M. Dacso, Henry C. Lin, Jessica Evert. Short term global health experiences and local partnership models: a framework. *BMC Globalization and Health* **11**:50, 2015  
<https://globalizationandhealth.biomedcentral.com/articles/10.1186/s12992-015-0135-7>

### Academic Honesty and Standards

Academic honesty is essential to the continued functioning of the University of British Columbia as an institution of higher learning and research. All UBC students are expected to behave as honest and responsible members of an academic community. Breach of those expectations or failure to follow the appropriate policies, principles, rules, and guidelines of the University with respect to academic honesty may result in disciplinary action.

It is the student's obligation to inform himself or herself of the applicable standards for academic honesty. Students must be aware that standards at the University of British Columbia may be different from those in secondary schools or at other institutions. If a student is in any doubt as to the standard of academic honesty in a particular course or assignment, then the student must consult with the instructor as soon as possible, and in no case should a student submit an assignment if the student is not clear on the relevant standard of academic honesty.

If an allegation is made against a student, the Registrar may place the student on academic hold until the President has made his or her final decision. When a student is placed on academic hold, the student is blocked from all activity in the Student Service Centre.

## **5. UBC Curriculum Consultations**



## 5.1 UBC Curriculum Consultation: School of Nursing



THE UNIVERSITY OF BRITISH COLUMBIA

### UBC Curriculum Consultation Request

**To:**

Name: Suzanne Campbell	Date: August 16, 2016
Dept./School: School of Nursing	Faculty: School of Nursing

**From:**

Name: Dr. Brian Westerberg	Dept./School: Surgery/Branch for International Surgical Care
Faculty: Medicine	Phone: 604-875-5372
E-mail: <a href="mailto:surgery.international@ubc.ca">surgery.international@ubc.ca</a> or <a href="mailto:BWesterberg@providencehealth.bc.ca">BWesterberg@providencehealth.bc.ca</a>	Fax: 604-875-4036

We are proposing curriculum changes for the following courses or programs as detailed on the attached form(s).

Course Number or Program Title:

Masters of Global Surgical Care (MGSC)

We anticipate that you may have some interest in these proposals and we would appreciate receiving your comments on this form.

PLEASE RESPOND NO LATER THAN: September 1, 2016

### Response

☒ We support the Proposal. ( ) We have no interest in the proposal.

( ) We **DO NOT** support the Proposal (Reasons must be listed below or appended.).

Comments (Please type or print):

### Respondent:

Name/Signature: <i>Suzanne H. Campbell</i> Suzanne H. Campbell	Dept./School: Nursing
Faculty: of Applied Science	Phone/Fax: 604-822-7748

**N. B.** The originator should also send a copy of this form to the Head of the Department/School consulted.



THE UNIVERSITY OF BRITISH COLUMBIA

## UBC Curriculum Consultation Report for Category 1 Curriculum Proposals.

This form should be stapled to the paper copy of the relevant curriculum change form.

Faculty: Medicine	Department: Surgery/Branch for International Surgical Care	Date: (dd mm yy) August 16, 2016
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Name of Course or Program: Masters of Global Surgical Care (MGSC)
Identification Number:

**Consultations:**

List consultants, attach their signed memos, and include below your responses to any questions that they raised.

Name	Dept/School	Faculty
1. Suzanne Campbell	Director, School of Nursing	School of Nursing <i>Applied Science</i>
Response: <i>No questions or concerns - looks like an exciting program</i>		
2. John Oliffe	Prof. School of Nursing	<i>Applied Science</i>
Response: <i>No concerns - support.</i>		
3.		
Response:		
4.		
Response:		
5.		
Response:		
6.		
Response:		

## 5.2 UBC Curriculum Consultation: First Nations House of Learning



THE UNIVERSITY OF BRITISH COLUMBIA

### UBC Curriculum Consultation Request

**To:**

Name: Dr. Linc Kesler	Date: August 16, 2016
Dept./School: First Nations House of Learning	Faculty: Academic Affairs

**From:**

Name: Dr. Brian Westerberg	Dept./School: Surgery/Branch for International Surgical Care
Faculty: Medicine	Phone: 604-875-5372
E-mail: <a href="mailto:surgery.international@ubc.ca">surgery.international@ubc.ca</a> or <a href="mailto:BWesterberg@providencehealth.bc.ca">BWesterberg@providencehealth.bc.ca</a>	Fax: 604-875-4036

We are proposing curriculum changes for the following courses or programs as detailed on the attached form(s).

Course Number or Program Title:  
**SURG 518: Surgical Care in Canada's Indigenous Communities with Global Comparisons**

We anticipate that you may have some interest in these proposals and we would appreciate receiving your comments on this form.

PLEASE RESPOND NO LATER THAN:	September 1, 2016
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### Response


☒ (x) We support the Proposal.    ☐ ( ) We have no interest in the proposal.

☐ ( ) We **DO NOT** support the Proposal (Reasons must be listed below or appended.).

**Comments (Please type or print):**

I appreciate the inclusion of topics related to the surgical care of Indigenous people in the Global Surgery program through this course, and I very much appreciate the design of the program in addressing the social and pragmatic factors addressing surgical care. In the specific design of this course, I do think a missing component is some attention to the historical factors shaping many Indigenous people's attitudes towards surgery and medical institutions more generally: in particular, it would be helpful for students in Canada to be aware of the history of the Indian residential schools, the Indian hospital system, and other institutional settings in which experiences of abuse and untoward experimentation were not uncommon and have left a legacy of mistrust of institutions, both medical and otherwise. This is fundamental knowledge for thinking about more productive contemporary and future relations.

**Respondent:**

Name/Signature:  Linc Kesler	Dept./School: First Nations House of Learning
Faculty: Academic Affairs	Phone/Fax: 2.3071

**N. B.** The originator should also send a copy of this form to the Head of the Department/School consulted.



THE UNIVERSITY OF BRITISH COLUMBIA

## UBC Curriculum Consultation Report for Category 1 Curriculum Proposals.

**This form should be stapled to the paper copy of the relevant curriculum change form.**

Faculty: Medicine	Department: Surgery/Branch for International Surgical Care	Date: (dd mm yy) August 16, 2016
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Name of Course or Program: <b>SURG 518: Surgical Care in Canada's Indigenous Communities with Global Comparisons</b>
Identification Number:

### Consultations:

List consultants, attach their signed memos, and include below your responses to any questions that they raised.

Name	Dept/School	Faculty
1. Dr. Linc Kesler	Director, First Nations House of Learning	First Nations House of Learning
Response:		
2.		
Response:		
3.		
Response:		
4.		
Response:		
5.		
Response:		
6.		
Response:		

### 5.3 UBC Curriculum Consultation: School of Population and Public Health



THE UNIVERSITY OF BRITISH COLUMBIA

## UBC Curriculum Consultation Report for Category 1 Curriculum Proposals.

**This form should be stapled to the paper copy of the relevant curriculum change form.**

Faculty: Medicine	Department: Surgery/Branch for International Surgical Care	Date: (dd mm yy) 30/05/2016
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Name of Course or Program: Masters of Global Surgical Care (MGSC)
Identification Number:

**Consultations:**

List consultants, attach their signed memos, and include below your responses to any questions that they raised.

Name	Dept/School	Faculty
1. Dr. David Patrick	Director, School for Population and Public Health	Medicine
<p>Response: We agree that this program is well designed. It has some general content overlap but has been uniquely tailored for a surgical audience. We agree that it will be possible to work with SPPH 540 and 517 as part of the requirements.</p> <p>SPPH 409 (Indigenous Health) is being revamped and will be back on line for the fall of 2017.</p> <p>We will articulate a plan to split revenue to the program in proportion to how teaching is provided for the individual core courses.</p> <p>As for future developments, SPPH (and other units within the Faculty of Medicine) is working on an inter-professional Evidence Based Healthcare offering. We would be keen to look for synergy and/or opportunities for cross-listing electives.</p>		
2.		
Response:		
3.		
Response:		
4.		



THE UNIVERSITY OF BRITISH COLUMBIA

## UBC Curriculum Consultation Request

**To:**

Name: Dr. David Patrick	Date: 30/05/2016
Dept./School: School for Population and Public Health	Faculty: Medicine

**From:**

Name: Dr. Brian Westerberg	Dept./School: Surgery
Faculty: Medicine	Phone: 604-875-5372
E-mail: <a href="mailto:surgery.international@ubc.ca">surgery.international@ubc.ca</a> or <a href="mailto:BWesterberg@providencehealth.bc.ca">BWesterberg@providencehealth.bc.ca</a>	Fax: 604-875-4036

We are proposing curriculum changes for the following courses or programs as detailed on the attached form(s).

Course Number or Program Title:

Masters of Global Surgical Care (MGSC)

We anticipate that you may have some interest in these proposals and we would appreciate receiving your comments on this form.

PLEASE RESPOND NO LATER THAN:	01/06/2016
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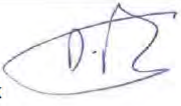
### Response

( ☒ ) We support the Proposal. ( ☐ ) We have no interest in the proposal.

( ☐ ) We **DO NOT** support the Proposal (Reasons must be listed below or appended.).

**Comments (Please type or print):**

### Respondent:

 Name: David Patrick	Dept./School: Director, SPPH
Faculty: Medicine	Phone/Fax: 604 822 3910

**N. B.** The originator should also send a copy of this form to the Head of the Department/School consulted.

## 5.4 UBC Library Curriculum Consultation: SURG 560

THE UNIVERSITY OF BRITISH COLUMBIA



### UBC Library Curriculum Consultation

For new courses or programs, or substantial changes to existing ones, consultation with the Library is essential in the early planning stages and, ideally, two weeks should be given to complete this consultation form. The name of your librarian consultant may be found at: <http://directory.library.ubc.ca/librarianconsultants>. Please complete the top portion of the form and send it to the librarian consultant electronically.

**To:**

Name: Aleteia Greenwood	Date: June 1, 2016
Library Branch/Division: Woodward Library	<a href="mailto:aleteia.greenwood@ubc.ca">aleteia.greenwood@ubc.ca</a> 604 822-0689

**From:**

Name: Dr. Brian Westerberg	Dept./School: Surgery/Branch for International Surgical Care
Faculty: Medicine	Phone: 604 875 5372
E-mail: <a href="mailto:surgery.international@ubc.ca">surgery.international@ubc.ca</a> or <a href="mailto:BWesterberg@providencehealth.bc.ca">BWesterberg@providencehealth.bc.ca</a>	Fax: 604 875 4036

We are proposing curriculum changes for the following courses or programs:

**New Program: Master of Global Surgical Care**

**New Course:**

- SURG 560 (6) Global Surgical Care Field Practicum

Effective Session: Winter Year: 2017	
Proposed Calendar Entry:  Masters of Global Surgical Care  Program Overview  The Masters of Global Surgical Care (MGSC) is a program within the Faculty of Medicine.  This online two-year, 30 credit specialized program is designed to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.	URL: <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.209.0.0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.209.0.0</a>  Present Calendar Entry: N/A  Type of Action: Create new master's program in Global Surgical Care  Rationale:  The creation of this program has been driven, in part, to address an unfilled educational need presented by rapidly growing interest in academic global health programs, in part by a desire to collaborate between the Faculty of Medicine and the School for Population and Public Health and in part to raise UBC's profile and to attract students (both within Canada and abroad), and to collaborate internationally.

<p>The program provides a strong foundation for present and future global surgical care professionals by developing knowledge and skills in the interpretation and use of published experience and research, balanced with applied learning in low resource settings.</p> <p>A blended model of practicum based learning and on-line teaching methods facilitate the participation of candidates from across Canada and around the world.</p> <p><b>Program Requirements</b></p> <p>Students will be required to complete 30 credits of SURG and SPPH courses which include a 6 credit Global Surgical Care Field Practicum.</p> <ol style="list-style-type: none"> <li>1. SURG 510 (3)</li> <li>2. SURG 512 (3)</li> <li>3. SURG 514 (3)</li> <li>4. SPPH 540 (3)</li> <li>5. SPPH 517 (3)</li> <li>6. SURG 518 (3)</li> <li>7. SURG 542 (3)</li> <li>8. SPPH 409 (3)</li> <li>9. SURG 560 (6)</li> </ol>	<p>Surgical care clinicians, residents in training and health professionals from many disciplines wish to incorporate international surgical care into their careers. They are pursuing training and experiences that will prepare them to make effective contributions in addressing the surgical care problems of low resource settings globally. Global surgical care delivery projects, international partnerships focused on surgical care education and research and global disasters requiring a surgical care response all highlight the opportunities for physicians to help. Unfortunately, these opportunities also prompt unease at often being asked to provide surgical and other services for which they are ill-equipped and that may impose approaches to care that, while well-intentioned, are inappropriate. This master's program bridges that gap and meets the learning needs of this growing cadre of students. Currently, there are no accredited graduate-level degree programs available to this cadre that focus on surgical care issues and this proposed master's program would be unique in the world.</p> <p>In 2015, the Branch for International Surgical Care launched the first-ever online graduate certificate program focusing on International Surgery. This Graduate Certificate in Global Surgical Care (GCGSC) is comprised of SURG courses developed from 2009 to 2014 and will ladder into the master's program. Graduates of SURG courses as well as surgery-related clinicians and residents across Canada and abroad have expressed a strong desire for additional courses that will lead to a master's program in international surgical care. This conclusion was reinforced in an independent study by a masters student of the Sauder School of Business examining the development of a masters program in global surgical care.</p> <p>These courses are delivered entirely online, are extremely innovative and contribute to UBC's strategic goal of strengthening its presence as a globally influential university and its reputation as an international leader in health education, research and community service.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>SURG 518 (3) Surgical Care in Remote Indigenous Communities of Canada with Global Comparisons</b></p> <p>Online Course. Critiques the current and historical provision of surgical care services to remote indigenous communities in Canada and globally. Examines challenges and opportunities confronting both the clinician and the service delivery system, embracing lessons learned from these communities.</p>	<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> The recent influential publication of the Lancet Commission on Global Surgery includes the statement that underserved communities in high income countries constitute a neglected area; the recent United Nations Declaration of the Rights of Indigenous</p>



<p><i>This course is not eligible for Credit/D/Fail grading.</i>  <i>Prerequisite: SURG 510.</i></p>	<p>Peoples includes health care rights; the recent Canadian Summit on Surgical Care in Rural Regions of Canada makes special mention of the underserved indigenous communities. After a long history of objection the Canadian Federal Government has announced its acceptance of the United Nations Declaration of the Rights of Indigenous Peoples in May 2016. These high-level conclusions highlight the need to address this important topic, yet no academic courses which address these issues exist to date. This course will provide the background knowledge and discussion format for clinicians and policy makers to both understand the complexity and seek solutions in this neglected surgical care area. By offering this unique course, UBC will be seen as a leader in responding to both national and international concern. It also draws on indigenous voices and will have synergy with UBC's Centre for Indigenous Health. The course will promote critical thinking on, and ultimately will improve, the provision of surgical care services to remote indigenous communities in Canada and abroad.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>SURG 542 (3) Directed Study in Global Surgical Care</b></p> <p>Online course. Literature research and analysis within global surgical care is chosen by the student in consultation with a advisor to support in-depth learning of the current knowledge and to explore knowledge deficits that need to be addressed.</p> <p><i>This course is not eligible for Credit/D/Fail grading.</i>  <i>Prerequisite: SURG 510, 512, and 514</i></p>	<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> Global Surgical Care, although practiced for centuries, is only recently an emerging discipline within Global Health. Therefore, the body of published literature on any given surgical care topic, although increasing rapidly, is scattered and not well known, handicapping global surgical care professionals. Such professionals represent a number of sub-disciplines within surgical care (e.g. surgery, anaesthesia, obstetrics, nursing, rehabilitation, surgical project administration, etc.). This course will provide opportunity for the student to carry out an exhaustive search of the world literature, both of the mainstream resources and also of the "grey" literature (e.g. masters theses, conference presentations, major NGO reports) on a global surgical care topic within the student's own sub-discipline, to present an analysis of the literature and to postulate the need and direction for future publications. Such activity will not only promote knowledge acquisition and critical thinking for the student but will contribute significantly to the education of peers and to UBC's Global Surgical Care knowledge repository.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>SURG 560 (6) Global Surgical Care Field Practicum</b></p> <p>Online Course with on-site field placement. Proposal development,</p>	<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b></p>

<p>implementation and high-level written report of a surgical care field practicum in an underserved location globally, producing practical "on-the-ground" skill <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><i>Prerequisite:</i> SURG 510, 512, 514, and SPPH 517</p>	<p>Create new course</p> <p><b>Rationale for Proposed Change:</b> This course is the field experience of the MGSC program. Because the Masters is a professional degree based on course content, this course will provide opportunity for "grounding" of the knowledge and skills attained in the other courses of the program. It will enable students to synthesize the knowledge gained from the coursework, transfer their knowledge to one aspect of International Surgical Care practice, and demonstrate achievement of the Masters program objectives. Also, the written report could well provide the basis for a publication or for a major conference presentation.</p>
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**This section to be completed by librarian:**

Please indicate the effect in terms of library support, appending additional pages if necessary.

Library Service or Resource	Description of Effect (cost, etc.)
<p>UBC Librarian instruction (e.g., classes with a librarian, tours, online resource guides, online tutorials, etc.)</p>	<p>Research skills workshops can be arranged with a medical liaison librarian (<a href="http://directory.library.ubc.ca/subjectlibrarians/">http://directory.library.ubc.ca/subjectlibrarians/</a>) to assist students how to search for materials in the area (e.g., global health, public health, surgery) and how to access resources at UBC library.</p> <p>Because this is an online program, we recommend meeting with a UBC medical librarian to discuss the research information management components of the program and whether there is an online support need.</p> <p>As programs and courses grow and increase in number, services become more constrained. The UBC Library will support the course as best as possible.</p>
<p>Reference assistance (e.g., ongoing one-on-one help)</p>	<p>Reference assistance is available at the UBC Biomedical Branch Library in the Diamond Centre in person, or by email or phone with the librarian or via virtual reference (AskAway). Assistance can also be obtained from the UBC Woodward Library on main campus.</p>
<p>Collections – required and recommended readings, course reserves</p> <p>Collections – required and recommended readings, course reserves</p>	<p>No assigned text book.</p> <p>Understandably, as the course is designed to allow students to work on their own projects, no <i>specific</i> resources are required; no reading list has been set. As such it is not possible to know if the Library has the resources instructors may expect.</p> <p>We understand the course was run as a pilot last year and was able to be supported. Should resources be needed, additional funds from the department may be</p>

	<p>required.</p> <p>Should the students be using resources licensed by the Library, please ensure faculty and students have reviewed the material on Copyright regulations at <a href="http://copyright.ubc.ca/guidelines-and-resources/copyright-guidelines/">http://copyright.ubc.ca/guidelines-and-resources/copyright-guidelines/</a>. Please consult <a href="http://copyright.ubc.ca/support/contact-us/">http://copyright.ubc.ca/support/contact-us/</a> if you have any questions.</p>
Collections – depth of the collection in relevant areas	<p>We understand that the class discusses papers from the literature which rely on UBC subscriptions to electronic journals.</p> <p>In general, the Library's current subscriptions to online and print journals and book collections should adequately support this course as it supported it last year.</p> <p>If further resources are required before, during or after the start of the course, funding from the department may be necessary.</p>
Collections – electronic resources required and licences (e.g., impact on simultaneous users, contract considerations)	No impact is anticipated.
Collaboration with other libraries, UBC or otherwise, if interdisciplinary program (consult with the other branches/libraries affected and include their comments with yours)	N/A
Physical facilities (e.g., sufficient room for group work; in-library work, etc.)	The UBC Biomedical Branch Library and Woodward Library provide limited study spaces for individual and group study.
Other (specify)	N/A

☒ Proposal has an impact on the Library and can be supported.

☐ Proposal cannot be supported without additional resources; see details above or appended.

☐ Proposal has no impact on the Library.

Signature: Alecia Greenwood Date: June 6, 2016

## 5.5 UBC Library Curriculum Consultation: SURG 542

THE UNIVERSITY OF BRITISH COLUMBIA



### UBC Library Curriculum Consultation

For new courses or programs, or substantial changes to existing ones, consultation with the Library is essential in the early planning stages and, ideally, two weeks should be given to complete this consultation form. The name of your librarian consultant may be found at: <http://directory.library.ubc.ca/librarianconsultants>. Please complete the top portion of the form and send it to the librarian consultant electronically.

**To:**

Name: Aleteia Greenwood	Date: June 1, 2016
Library Branch/Division: Woodward Library	<a href="mailto:aleteia.greenwood@ubc.ca">aleteia.greenwood@ubc.ca</a> 604 822-0689

**From:**

Name: Dr. Brian Westerberg	Dept./School: Surgery/Branch for International Surgical Care
Faculty: Medicine	Phone: 604 875 5372
E-mail: <a href="mailto:surgery.international@ubc.ca">surgery.international@ubc.ca</a> or <a href="mailto:BWesterberg@providencehealth.bc.ca">BWesterberg@providencehealth.bc.ca</a>	Fax: 604 875 4036

We are proposing curriculum changes for the following courses or programs:

**New Program: Master of Global Surgical Care**

**New Course:**

- SURG 542 (3) Directed Study in Global Surgical Care

Effective Session: Winter Year: 2017	
Proposed Calendar Entry:  Masters of Global Surgical Care  Program Overview  The Masters of Global Surgical Care (MGSC) is a program within the Faculty of Medicine.  This online two-year, 30 credit specialized program is designed to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.209.0.0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.209.0.0</a>  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new master's program in Global Surgical Care  <b>Rationale:</b> The creation of this program has been driven, in part, to address an unfilled educational need presented by rapidly growing interest in academic global health programs, in part by a desire to collaborate between the Faculty of Medicine and the School for Population and Public Health and in part to raise UBC's profile and to attract students (both within Canada and abroad), and to collaborate internationally.

<p>The program provides a strong foundation for present and future global surgical care professionals by developing knowledge and skills in the interpretation and use of published experience and research, balanced with applied learning in low resource settings.</p> <p>A blended model of practicum based learning and on-line teaching methods facilitate the participation of candidates from across Canada and around the world.</p> <p><b>Program Requirements</b></p> <p>Students will be required to complete 30 credits of SURG and SPPH courses which include a 6 credit Global Surgical Care Field Practicum.</p> <ol style="list-style-type: none"> <li>1. SURG 510 (3)</li> <li>2. SURG 512 (3)</li> <li>3. SURG 514 (3)</li> <li>4. SPPH 540 (3)</li> <li>5. SPPH 517 (3)</li> <li>6. SURG 518 (3)</li> <li>7. SURG 542 (3)</li> <li>8. SPPH 409 (3)</li> <li>9. SURG 560 (6)</li> </ol>	<p>Surgical care clinicians, residents in training and health professionals from many disciplines wish to incorporate international surgical care into their careers. They are pursuing training and experiences that will prepare them to make effective contributions in addressing the surgical care problems of low resource settings globally. Global surgical care delivery projects, international partnerships focused on surgical care education and research and global disasters requiring a surgical care response all highlight the opportunities for physicians to help. Unfortunately, these opportunities also prompt unease at often being asked to provide surgical and other services for which they are ill-equipped and that may impose approaches to care that, while well-intentioned, are inappropriate. This master's program bridges that gap and meets the learning needs of this growing cadre of students. Currently, there are no accredited graduate-level degree programs available to this cadre that focus on surgical care issues and this proposed master's program would be unique in the world.</p> <p>In 2015, the Branch for International Surgical Care launched the first-ever online graduate certificate program focusing on International Surgery. This Graduate Certificate in Global Surgical Care (GCGSC) is comprised of SURG courses developed from 2009 to 2014 and will ladder into the master's program. Graduates of SURG courses as well as surgery-related clinicians and residents across Canada and abroad have expressed a strong desire for additional courses that will lead to a master's program in international surgical care. This conclusion was reinforced in an independent study by a masters student of the Sauder School of Business examining the development of a masters program in global surgical care.</p> <p>These courses are delivered entirely online, are extremely innovative and contribute to UBC's strategic goal of strengthening its presence as a globally influential university and its reputation as an international leader in health education, research and community service.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>SURG 518 (3) Surgical Care in Remote Indigenous Communities of Canada with Global Comparisons</b></p> <p>Online Course. Critiques the current and historical provision of surgical care services to remote indigenous communities in Canada and globally. Examines challenges and opportunities confronting both the clinician and the service delivery system, embracing lessons learned from these communities.</p>	<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> The recent influential publication of the Lancet Commission on Global Surgery includes the statement that underserved communities in high income countries constitute a neglected area; the recent United Nations Declaration of the Rights of Indigenous</p>

<p><i>This course is not eligible for Credit/D/Fail grading.</i>  <i>Prerequisite: SURG 510.</i></p>	<p>Peoples includes health care rights: the recent Canadian Summit on Surgical Care in Rural Regions of Canada makes special mention of the underserved indigenous communities. After a long history of objection the Canadian Federal Government has announced its acceptance of the United Nations Declaration of the Rights of Indigenous Peoples in May 2016. These high-level conclusions highlight the need to address this important topic, yet no academic courses which address these issues exist to date. This course will provide the background knowledge and discussion format for clinicians and policy makers to both understand the complexity and seek solutions in this neglected surgical care area. By offering this unique course, UBC will be seen as a leader in responding to both national and international concern. It also draws on indigenous voices and will have synergy with UBC's Centre for Indigenous Health. The course will promote critical thinking on, and ultimately will improve, the provision of surgical care services to remote indigenous communities in Canada and abroad.</p>
<p><b>Proposed Calendar Entry:</b>  <b>SURG 542 (3) Directed Study in Global Surgical Care</b>          Online course. Literature research and analysis within global surgical care is chosen by the student in consultation with a advisor to support in-depth learning of the current knowledge and to explore knowledge deficits that need to be addressed.  <i>This course is not eligible for Credit/D/Fail grading.</i>  <i>Prerequisite: SURG 510, 512, and 514</i></p>	<p><b>URL:</b>          N/A</p> <p><b>Present Calendar Entry:</b>          N/A</p> <p><b>Type of Action:</b>          Create new course</p> <p><b>Rationale for Proposed Change:</b>          Global Surgical Care, although practiced for centuries, is only recently an emerging discipline within Global Health. Therefore, the body of published literature on any given surgical care topic, although increasing rapidly, is scattered and not well known, handicapping global surgical care professionals. Such professionals represent a number of sub-disciplines within surgical care (e.g. surgery, anaesthesia, obstetrics, nursing, rehabilitation, surgical project administration, etc.). This course will provide opportunity for the student to carry out an exhaustive search of the world literature, both of the mainstream resources and also of the "grey" literature (e.g. masters theses, conference presentations, major NGO reports) on a global surgical care topic within the student's own sub-discipline, to present an analysis of the literature and to postulate the need and direction for future publications. Such activity will not only promote knowledge acquisition and critical thinking for the student but will contribute significantly to the education of peers and to UBC's Global Surgical Care knowledge repository.</p>
<p><b>Proposed Calendar Entry:</b>  <b>SURG 560 (6) Global Surgical Care Field Practicum</b>          Online Course with on-site field placement. Proposal development.</p>	<p><b>URL:</b>          N/A</p> <p><b>Present Calendar Entry:</b>          N/A</p> <p><b>Type of Action:</b></p>

<p>implementation and high-level written report of a surgical care field practicum in an underserved location globally, producing practical "on-the-ground" skill  <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><i>Prerequisite:</i> SURG 510, 512, 514, and SPPH 517</p>	<p>Create new course</p> <p><b>Rationale for Proposed Change:</b>          This course is the field experience of the MGSC program. Because the Masters is a professional degree based on course content, this course will provide opportunity for "grounding" of the knowledge and skills attained in the other courses of the program. It will enable students to synthesize the knowledge gained from the coursework, transfer their knowledge to one aspect of International Surgical Care practice, and demonstrate achievement of the Masters program objectives. Also, the written report could well provide the basis for a publication or for a major conference presentation.</p>
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**This section to be completed by librarian:**

Please indicate the effect in terms of library support, appending additional pages if necessary.

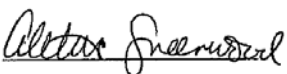
Library Service or Resource	Description of Effect (cost, etc.)
<p>UBC Librarian instruction (e.g., classes with a librarian, tours, online resource guides, online tutorials, etc.)</p>	<p>Research skills workshops can be arranged with a medical liaison librarian (<a href="http://directory.library.ubc.ca/subjectlibrarians/">http://directory.library.ubc.ca/subjectlibrarians/</a>) to assist students how to search for materials in the area (e.g., global health, public health, surgery) and how to access resources at UBC library.</p> <p>Because this is an online program, we recommend meeting with a UBC medical librarian to discuss the research information management components of the program and whether there is an online support need.</p> <p>As programs and courses grow and increase in number, services become more constrained. The UBC Library will support the course as best as possible.</p>
<p>Reference assistance (e.g., ongoing one-on-one help)</p>	<p>Reference assistance is available at the UBC Biomedical Branch Library in the Diamond Centre in person, or by email or phone with the librarian or via virtual reference (AskAway). Assistance can also be obtained from the UBC Woodward Library on main campus.</p>
<p>Collections – required and recommended readings, course reserves</p> <p>Collections – required and recommended readings, course reserves</p>	<p>No assigned text book.</p> <p>Understandably, as the course is designed to allow students to work on their own projects, no <i>specific</i> resources are required; no reading list has been set. As such it is not possible to know if the Library has the resources instructors may expect.</p> <p>We understand the course was run as a pilot last year and was able to be supported. Should resources be needed, additional funds from the department may be</p>

	<p>required.</p> <p>Should the students be using resources licensed by the Library, please ensure faculty and students have reviewed the material on Copyright regulations at <a href="http://copyright.ubc.ca/guidelines-and-resources/copyright-guidelines/">http://copyright.ubc.ca/guidelines-and-resources/copyright-guidelines/</a>. Please consult <a href="http://copyright.ubc.ca/support/contact-us/">http://copyright.ubc.ca/support/contact-us/</a> if you have any questions.</p>
Collections – depth of the collection in relevant areas	<p>We understand that the class discusses papers from the literature which rely on UBC subscriptions to electronic journals.</p> <p>In general, the Library's current subscriptions to online and print journals and book collections should adequately support this course as it supported it last year.</p> <p>If further resources are required before, during or after the start of the course, funding from the department may be necessary.</p>
Collections – electronic resources required and licences (e.g., impact on simultaneous users, contract considerations)	No impact is anticipated.
Collaboration with other libraries, UBC or otherwise, if interdisciplinary program (consult with the other branches/libraries affected and include their comments with yours)	N/A
Physical facilities (e.g., sufficient room for group work; in-library work, etc.)	The UBC Biomedical Branch Library and Woodward Library provide limited study spaces for individual and group study.
Other (specify)	N/A

☒ Proposal has an impact on the Library and can be supported.

☐ Proposal cannot be supported without additional resources; see details above or appended.

☐ Proposal has no impact on the Library.

Signature:  Date: June 6, 2016



## 5.6 UBC Library Curriculum Consultation: SURG 518

THE UNIVERSITY OF BRITISH COLUMBIA



### UBC Library Curriculum Consultation

For new courses or programs, or substantial changes to existing ones, consultation with the Library is essential in the early planning stages and, ideally, two weeks should be given to complete this consultation form. The name of your librarian consultant may be found at: <http://directory.library.ubc.ca/librarianconsultants>. Please complete the top portion of the form and send it to the librarian consultant electronically.

**To:**

<b>Name:</b> Aletheia Greenwood	<b>Date:</b> 6 June 2016
<b>Library Branch/Division:</b> Woodward Library	<a href="mailto:aletheia.greenwood@ubc.ca">aletheia.greenwood@ubc.ca</a> 604 822-0689

**From:**

<b>Name:</b> Dr. Brian Westerberg	<b>Dept./School:</b> Surgery/Branch for International Surgical Care
<b>Faculty:</b> Medicine	<b>Phone:</b> 604 875 5372
<b>E-mail:</b> <a href="mailto:surgery.international@ubc.ca">surgery.international@ubc.ca</a> or <a href="mailto:BWesterberg@providencehealth.bc.ca">BWesterberg@providencehealth.bc.ca</a>	<b>Fax:</b> 604 875 4036

We are proposing curriculum changes for the following courses or programs:

**New Program: Master of Global Surgical Care**

**New Course:**

- SURG 518 (3) Surgical Care in Remote Indigenous Communities of Canada with Global

<b>Effective Session:</b> Winter <b>Year:</b> 2017	
<b>Proposed Calendar Entry:</b>  <b>Masters of Global Surgical Care</b>  <b>Program Overview</b>  The Masters of Global Surgical Care (MGSC) is a program within the Faculty of Medicine.  This online two-year, 30 credit specialized program is designed to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.209.0.0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.209.0.0</a>  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> Create new master's program in Global Surgical Care  <b>Rationale:</b>  The creation of this program has been driven, in part, to address an unfilled educational need presented by rapidly growing interest in academic global health programs, in part by a desire to collaborate between the Faculty of Medicine and the School for Population and Public Health and in part to raise UBC's profile and to attract students (both within Canada and abroad), and to

<p>The program provides a strong foundation for present and future global surgical care professionals by developing knowledge and skills in the interpretation and use of published experience and research, balanced with applied learning in low resource settings.</p> <p>A blended model of practicum based learning and on-line teaching methods facilitate the participation of candidates from across Canada and around the world.</p> <p><b>Program Requirements</b></p> <p>Students will be required to complete 30 credits of SURG and SPPH courses which include a 6 credit Global Surgical Care Field Practicum.</p> <ol style="list-style-type: none"> <li>1. SURG 510 (3)</li> <li>2. SURG 512 (3)</li> <li>3. SURG 514 (3)</li> <li>4. SPPH 540 (3)</li> <li>5. SPPH 517 (3)</li> <li>6. SURG 518 (3)</li> <li>7. SURG 542 (3)</li> <li>8. SPPH 409 (3)</li> <li>9. SURG 560 (6)</li> </ol>	<p>collaborate internationally.</p> <p>Surgical care clinicians, residents in training and health professionals from many disciplines wish to incorporate international surgical care into their careers. They are pursuing training and experiences that will prepare them to make effective contributions in addressing the surgical care problems of low resource settings globally. Global surgical care delivery projects, international partnerships focused on surgical care education and research and global disasters requiring a surgical care response all highlight the opportunities for physicians to help. Unfortunately, these opportunities also prompt unease at often being asked to provide surgical and other services for which they are ill-equipped and that may impose approaches to care that, while well-intentioned, are inappropriate. This master's program bridges that gap and meets the learning needs of this growing cadre of students. Currently, there are no accredited graduate-level degree programs available to this cadre that focus on surgical care issues and this proposed master's program would be unique in the world.</p> <p>In 2015, the Branch for International Surgical Care launched the first-ever online graduate certificate program focusing on International Surgery. This Graduate Certificate in Global Surgical Care (GCGSC) is comprised of SURG courses developed from 2009 to 2014 and will ladder into the master's program. Graduates of SURG courses as well as surgery-related clinicians and residents across Canada and abroad have expressed a strong desire for additional courses that will lead to a master's program in international surgical care. This conclusion was reinforced in an independent study by a masters student of the Sauder School of Business examining the development of a masters program in global surgical care.</p> <p>These courses are delivered entirely online, are extremely innovative and contribute to UBC's strategic goal of strengthening its presence as a globally influential university and its reputation as an international leader in health education, research and community service.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>SURG 518 (3) Surgical Care in Remote Indigenous Communities of Canada with Global Comparisons</b></p> <p>Online Course. Critiques the current and historical provision of surgical care services to remote indigenous communities in Canada and globally. Examines challenges and opportunities confronting both the clinician and the service delivery system, embracing lessons learned from these</p>	<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> The recent influential publication of the Lancet Commission on Global Surgery includes the statement that underserved communities in high income countries constitute a neglected area;</p>

<p>communities.</p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><i>Prerequisite: SURG 510.</i></p>	<p>the recent United Nations Declaration of the Rights of Indigenous Peoples includes health care rights; the recent Canadian Summit on Surgical Care in Rural Regions of Canada makes special mention of the underserved indigenous communities. After a long history of objection the Canadian Federal Government has announced its acceptance of the United Nations Declaration of the Rights of Indigenous Peoples in May 2016. These high-level conclusions highlight the need to address this important topic, yet no academic courses which address these issues exist to date. This course will provide the background knowledge and discussion format for clinicians and policy makers to both understand the complexity and seek solutions in this neglected surgical care area. By offering this unique course, UBC will be seen as a leader in responding to both national and international concern. It also draws on indigenous voices and will have synergy with UBC's Centre for Indigenous Health. The course will promote critical thinking on, and ultimately will improve, the provision of surgical care services to remote indigenous communities in Canada and abroad.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>SURG 542 (3) Directed Study in Global Surgical Care</b></p> <p>Online course. Literature research and analysis within global surgical care is chosen by the student in consultation with a advisor to support in-depth learning of the current knowledge and to explore knowledge deficits that need to be addressed.</p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><i>Prerequisite: SURG 510, 512, and 514</i></p>	<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> Global Surgical Care, although practiced for centuries, is only recently an emerging discipline within Global Health. Therefore, the body of published literature on any given surgical care topic, although increasing rapidly, is scattered and not well known, handicapping global surgical care professionals. Such professionals represent a number of sub-disciplines within surgical care (e.g. surgery, anaesthesia, obstetrics, nursing, rehabilitation, surgical project administration, etc.). This course will provide opportunity for the student to carry out an exhaustive search of the world literature, both of the mainstream resources and also of the "grey" literature (e.g. masters theses, conference presentations, major NGO reports) on a global surgical care topic within the student's own sub-discipline, to present an analysis of the literature and to postulate the need and direction for future publications. Such activity will not only promote knowledge acquisition and critical thinking for the student but will contribute significantly to the education of peers and to UBC's Global Surgical Care knowledge repository.</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>SURG 560 (6) Global Surgical Care Field Practicum</b></p> <p>Online Course with on-site field</p>	<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> N/A</p>

<p>placement. Proposal development, implementation and high-level written report of a surgical care field practicum in an underserved location globally, producing practical "on-the-ground" skill <i>This course is not eligible for Credit/D/Fail grading.</i></p> <p><i>Prerequisite: SURG 510, 512, 514, and SPPH 517</i></p>	<p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> This course is the field experience of the MGSC program. Because the Masters is a professional degree based on course content, this course will provide opportunity for "grounding" of the knowledge and skills attained in the other courses of the program. It will enable students to synthesize the knowledge gained from the coursework, transfer their knowledge to one aspect of International Surgical Care practice, and demonstrate achievement of the Masters program objectives. Also, the written report could well provide the basis for a publication or for a major conference presentation.</p>
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**This section to be completed by librarian:**

Please indicate the effect in terms of library support, appending additional pages if necessary.

Library Service or Resource	Description of Effect (cost, etc.)
<p>UBC Librarian instruction (e.g., classes with a librarian, tours, online resource guides, online tutorials, etc.)</p>	<p>Research skills workshops can be arranged with a medical liaison librarian (<a href="http://directory.library.ubc.ca/subjectlibrarians/">http://directory.library.ubc.ca/subjectlibrarians/</a>) to assist students how to search for materials in the area (e.g., global health, public health, surgery) and how to access resources at UBC library.</p> <p>Because this is an online program, we recommend meeting with a UBC medical librarian to discuss the research information management components of the program and whether there is an online support need.</p> <p>As programs and courses grow and increase in number, services become more constrained. The UBC Library will support the course as best as possible.</p>
<p>Reference assistance (e.g., ongoing one-on-one help)</p>	<p>Reference assistance is available at the UBC Biomedical Branch Library in the Diamond Centre in person, or by email or phone with the librarian or via virtual reference (AskAway). Assistance can also be obtained from the UBC Woodward Library on main campus.</p>
<p>Collections – required and recommended readings, course reserves</p> <p>Collections – required and recommended readings, course reserves</p>	<p>No assigned text book.</p> <p>Understandably, as the course is designed to allow students to work on their own projects, no <i>specific</i> resources are required; no reading list has been set. As such it is not possible to know if the Library has the resources instructors may expect.</p> <p>We understand the course was run as a pilot last year and was able to be supported. Should resources be</p>

	<p>needed, additional funds from the department may be required.</p> <p>Should the students be using resources licensed by the Library, please ensure faculty and students have reviewed the material on Copyright regulations at <a href="http://copyright.ubc.ca/guidelines-and-resources/copyright-guidelines/">http://copyright.ubc.ca/guidelines-and-resources/copyright-guidelines/</a>. Please consult <a href="http://copyright.ubc.ca/support/contact-us/">http://copyright.ubc.ca/support/contact-us/</a> if you have any questions.</p>
Collections – depth of the collection in relevant areas	<p>We understand that the class discusses papers from the literature which rely on UBC subscriptions to electronic journals.</p> <p>In general, the Library's current subscriptions to online and print journals and book collections should adequately support this course as it supported it last year.</p> <p>If further resources are required before, during or after the start of the course, funding from the department may be necessary.</p>
Collections – electronic resources required and licences (e.g., impact on simultaneous users, contract considerations)	No impact is anticipated.
Collaboration with other libraries, UBC or otherwise, if interdisciplinary program (consult with the other branches/libraries affected and include their comments with yours)	N/A
Physical facilities (e.g., sufficient room for group work; in-library work, etc.)	The UBC Biomedical Branch Library and Woodward Library provide limited study spaces for individual and group study.
Other (specify)	N/A

- ☒ Proposal has an impact on the Library and can be supported.  
☐ Proposal cannot be supported without additional resources; see details above or appended.  
☐ Proposal has no impact on the Library.

Signature:  Date: June 6, 2016

## 6. Budgetary Impact Form

## THE UNIVERSITY OF BRITISH COLUMBIA


**Senate Curriculum Committee**  
**Budgetary Impact of Curriculum Proposals**

<b>From:</b>		<b>Date:</b>
Dept./School: Surgery/ Branch for International Surgical Care		Faculty: Medicine
Phone: 604 875 5372		Fax: 604 875 4036
E-mail: surgery.international@ubc.ca or BWesterberg@providencehealth.bc.ca		

Curriculum change(s) that this form applies to:  
 (one form may be used for multiple changes with similar budgetary impact)

**New Program: Master of Global Surgical Care**

**New Courses:**

- SURG 518 (3) Surgical Care in Remote Indigenous Communities of Canada with Global Comparisons
- SURG 542 (3) Directed Study in Global Surgical Care
- SURG 560 (6) Global Surgical Care Field Practicum

Indicate the budgetary impact or implications of the proposed curriculum changes and provide a brief explanation of additional resources, if required:

Select from one of the following two choices:

- ☒ **NO.** The Faculty does NOT require additional budget to implement the proposed curriculum changes.
- ☐ **YES.** Additional budget IS required to implement this curriculum change. A brief explanation is optional.

If YES, approval and signature of the Provost's office will be required before the proposal is presented to Senate.  
 And if the UBC Library Curriculum Consultation form indicates that the proposal cannot be supported without additional resources, approval and signature of the University Librarian will also be required.

Signature of Dept. Head:

Signature of Dean:  
(required)

Signature of Provost:  
(if additional budget is required)

Signature of University Librarian:  
(if additional library budget is required)

*[Signature]* Date: June 2/16

*[Signature]* Date: Oct 5/16

\_\_\_\_\_  
Date: \_\_\_\_\_

\_\_\_\_\_  
Date: \_\_\_\_\_

## 7. Appendix A: Program Components

### 7.1 GCGSC and MGSC Comparative Table

	Graduate Certificate in Global Surgical Care	Master of Global Surgical Care
<b>Admissions Criteria</b>	<p>Candidates must meet <a href="#">minimum entry requirements</a> established by Graduate and Post-Doctoral Studies. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Master's Admissions.</p> <p>Applicants must: (a) hold either an MD or other health-care-related degree; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.</p>	<p>Candidates must meet <a href="#">minimum entry requirements</a> established by Graduate and Post-Doctoral Studies. For more information, refer to the Faculty of Graduate and Postdoctoral Studies' entry in the Academic Calendar regarding Master's Admissions.</p> <p>Applicants must: (a) hold either an MD or other health-care-related degree; and (b) have been involved or specifically plan to be involved in surgical care programs in underserved regions globally, whether clinically, educationally, administratively or in research.</p>
<b>Overview</b>	<p>This is an online program that aims to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.</p> <ul style="list-style-type: none"> <li>• Launched in September 2015</li> <li>• Current enrollment of 18 students</li> <li>• 140 students have completed one or more GCGSC required course</li> </ul>	<p>This online two-year, 30 credit specialized program is designed to prepare surgical care professionals from many disciplines to address surgical challenges and contribute to finding solutions in low resource settings globally.</p> <p>The program provides a strong foundation for present and future global surgical care professionals by developing knowledge and skills in the interpretation and use of published experience and research, balanced with applied learning in low resource settings.</p> <p>A blended model of practicum based learning and on-line teaching methods facilitate the participation of candidates from across Canada and around the world.</p>
<b>Program Requirements</b>	<p>Students will be required to complete 12 credits of SURG and SPPH courses.</p> <ol style="list-style-type: none"> <li>1. SURG 510 (3)</li> <li>2. SURG 512 (3)</li> <li>3. SURG 514 (3)</li> <li>4. SPPH 540 (3)</li> </ol>	<p>Students will be required to complete 30 credits of SURG and SPPH courses which include a 6 credit Global Surgical Care Field Practicum.</p> <ol style="list-style-type: none"> <li>1. SURG 510 (3)</li> <li>2. SURG 512 (3)</li> <li>3. SURG 514 (3)</li> <li>4. SPPH 540 (3)</li> <li>5. SPPH 517 (3)</li> <li>6. SURG 518 (3)*</li> <li>7. SURG 542 (3)*</li> <li>8. SURG 560 (6)*</li> <li>9. Electives approve by Program Director (3)</li> </ol> <p>*indicates new course</p>
<b>Passing Grade</b>	Satisfactory <a href="#">Academic Progress</a> as defined by the Faculty of Graduate and Postdoctoral Studies for Master's students must be maintained.	Satisfactory <a href="#">Academic Progress</a> as defined by the Faculty of Graduate and Postdoctoral Studies for Master's students must be maintained.

## 7.2 Transfer Credit Policy: UBC Academic Calendar Excerpt

[UBC policy](#) allows graduate certificate programs to ladder into a specifically affiliated UBC master's degree. In such cases, courses taken to satisfy the requirements of a UBC graduate certificate may be fully transferable to the affiliated master's program, even if the certificate has been or will be awarded, provided that:

- a) The graduate certificate admission criteria are the same as the master's degree admission criteria. Note that students in a graduate certificate program will need to apply and be accepted to the master's program.
- b) The graduate certificate offers the same courses that comprise part of the master's course requirements.
- c) The passing grade for the graduate certificate program is the same as for the master's program.
- d) The courses that comprise the graduate certificate program are 500-level courses that have been approved by the UBC Senate.

## 7.3 MGSC Course Descriptions

**SURG 510 (3): Surgical Care in International Health.** Students will examine the historical beginnings, the reasons for the emergence of surgical care in the public health agenda and the details of the global burden of surgical care need. They will explore the wide spectrum of volunteerism, ethics related to clinical care and research in low resource settings, guidelines for activity (projects, programs, partnerships) and the role of advocacy in global surgical care. SURG 510 has been offered since 2009 and is a core course for the Graduate Certificate in Global Surgical Care.

**SURG 512 (3): Global Disability: A Surgical Care Mandate.** Students will critique current models addressing the fact that globally; one billion people live with a disability of whom 80% live in resource-limited settings which further compounds the family and public burden. Discussion focuses on frameworks for advocacy and alleviating the global burden of surgical disability. SURG 512 has been offered since 2012 and is a core course for the Graduate Certificate in Global Surgical Care.

**SURG 514 (3): Surgical Care in Humanitarian Disaster Response.** Students will examine the current status of global activity by national and international responders to both natural and conflict-related humanitarian disasters with particular emphasis on the role of surgical care. SURG 514 has been offered since 2014 and is a core course for the Graduate Certificate in Global Surgical Care.

**SPPH 540 (3): Program Planning and Evaluation.** Students will become literate and functionally competent in program planning and evaluation, a key aspect to international surgical work. The course involves developing a program plan and an evaluation proposal for a public health program, particularly as it relates to global surgical care initiatives. SPPH 540 is a core course for the Graduate Certificate in Global Surgical Care.



**SPPH 517 (3): Clinical Research methods for Surgical Procedures.** Students will examine how approaches for surgical research differ compared to medical research. They will learn many aspects of the research process from grant writing and proposal development, to applying for ethics, data analysis and statistical methods used in surgical research. They will become literate in systematic reviews, quality improvement and assurance, as well as technology evaluation in surgical research. SPPH 517 is currently a course requirement for Masters in Population and Public Health, and a key course for surgical trainees in the program.

**SURG 518 (3): Surgical Care in Canada's Rural and Remote Indigenous Communities with Global Comparisons.** Students will critique the current and historical provision of surgical care services to indigenous communities in Canada and globally. They will draw on indigenous voices to examine challenges and opportunities confronting both the clinician and the service delivery system, embracing lessons learned from these communities. The course will promote critical thinking on, and ultimately will improve the provision of surgical care services to indigenous communities in Canada and abroad.

**SURG 542 (3): Directed Study in Global Surgical Care.** Students will carry out an exhaustive search of the world literature, on a global surgical care topic. Topics will be chosen by the student in the specialty discipline in consultation with a faculty advisor to support in-depth learning of the current state of knowledge in that topic and to explore knowledge deficits that need to be addressed. This course will promote knowledge acquisition and critical thinking for the student and contribute significantly to the education of peers and to UBC's Global Surgical Care knowledge repository.

**SURG 560 (6): Global Surgical Care Field Practicum.** Students will complete an on-site field placement "grounding" their knowledge and skills attained in the other courses of the program. It will enable students to synthesize the knowledge gained from the coursework, transfer their knowledge to one aspect of International Surgical Care practice, and demonstrate achievement of the Masters program learning objectives. A high level written report will be the main evaluated component and could well provide the basis for a publication or for a major conference presentation.

**Electives (3):** Students will submit electives for approval to the Program Director.

#### **7.4 New Course Development: Faculty Contributors**

##### **SURG 560: Global Surgical Care Field Practicum:**

Dr. David Fairholm, MD, Dip Med Ed, FRCSC (*Course Lead*)  
Clinical Professor, Dept. of Surgery, (Neurosurgery), UBC

Dr. Flora Fang-Hwa Teng, MD, MPH, FRCSC  
Clinical Instructor, Dept. of Surgery, (Obstetrics and Gynecology), UBC

Dr. Geoffrey L. Blair, MD, FRCSC  
Director, Undergraduate Surgical Education, Clinical Professor, Dept. of Surgery, (Pediatric), UBC

**SURG 542: Directed Study in Global Surgical Care:**

Dr. Brian Westerberg, MD, MHSc, FRCSC (*Course Lead*)  
Clinical Professor, Dept. of Surgery (Otology & Neurotology), UBC

**SURG 518: Surgical Care in Canada's Indigenous Communities with Global Comparisons:**

Dr. Robert H. Taylor, C.M., MD, MIH, DipTM, FRCSC (*Course Lead*)  
Clinical Professor, Dept. of Surgery (General Surgery), UBC

Dr. Jane Lea, BSc, MD, FRCSC  
Clinical Assistant Professor, Dept. of Surgery (Otolaryngology), UBC

Dr. Nadine R. Caron, MD, MPH, FRCSC (*Content Review*)  
Associate Professor, UBC Northern Medical Program Co-Director, UBC Centre for  
Excellence in Indigenous Health

## 8. Appendix B: New Course Supporting Documents

### 8.1 SURG 542: Sample Learning Contract Template

#### Branch for International Surgical Care: SURG 542 Learning Contract

**Project Title:**

**Term Dates (Course Start & End Dates):**

**Student:**

**Student #:**

**Email:**

**Phone:**

**Directed Study Faculty Advisor:**

**UBC Faculty/Department/Division:**

**Email:**

**Phone:**

**Purpose:** *A general statement of the student's goals/purposes/research question*

**Objectives:** *A statement of the specific objectives/learning outcomes to be accomplished by the student upon completion of the contract*

**Learning activities/plan (i.e. reading list, relevant literature):** *A description of learning activities to be completed by the student and resources identified*

**Responsibilities:** *A list of the responsibilities for the Faculty Advisor and the student*

Student:

Directed Study Faculty Advisor:

**Assignments:** *Outline number of assignments, due dates & weighting of each*

1.

2.

4.

3.

**Signatures:**

Student: \_\_\_\_\_

Faculty Advisor: \_\_\_\_\_

Course Director: \_\_\_\_\_

Date: \_\_\_\_\_

## 8.2 SURG 560: Sample Practicum Agreement

### BRANCH FOR INTERNATIONAL SURGICAL CARE

Practicum Candidate:	Phone:	Email:
Field Supervisor:	Phone:	Email:
Address of practicum site:		
BISC Practicum Course Lead:	Phone:	Email:
Dates of Practicum:		
Mailing Address of Practicum Site:		

### Brief Description of the Practicum

The candidate will complete at least 4 weeks at the “on site location” proposed to be from *DATE* to *DATE*. The Practicum placement will be with the *NAME OF ONSITE INSTITUTION*. *DESCRIBE AS APPROPRIATE CHARACTERISTICS OF THE SPECIALIZED PRACTICUM THAT WILL BE PROVIDED AT THIS SITE*. Overall supervision will be provided by the BISC Course Lead (*NAME*) and the onsite Supervisor (*NAME OF SUPERVISOR*).

### Objectives of the Practicum

*THE FOLLOWING OBJECTIVES ARE DEFINED....*

- 
- 

Additional details of the goals, objectives, primary supervisor and method for Assessment is provided in the Practicum Project Plan document which accompanies this agreement.

### Terms of the Practicum Agreement

As a candidate of the Branch for International Surgical Care Practicum Program at the University of British Columbia, *the Candidate NAME* will complete a Practicum experience with *NAME OF SITE* on the following terms:

- 

#### Dates of “onsite” practicum

### Administration

The Practicum Candidate works under the administrative control of \_\_\_\_\_ NAME OF INSTITUTION

The Practicum Candidates’ BISC Course Lead is: \_\_\_\_\_ NAME

The Practicum Candidate’s on site supervisor is: \_\_\_\_\_ NAME

### Practicum Activities

The Practicum Candidate will work on site from *DATE* to *DATE*. The Candidate will be involved [[in six primary activities (consultation, Project Plan preparation, on site activities, report writing and related activities, evaluation of practicum and assessment of performance and written report). INDIVIDUALIZE THESE]]. The Candidate will keep a log describing weekly activities and supervision experiences.

The primary Practicum activities will include: THESE ARE EXAMPLES, INDIVIDUALIZE AS NEEDED

- 
- 
- 

### Supervision

The candidate \_\_\_\_\_ NAME will assume responsibility for preparation and approval of the Practicum agreement and plan, and will fulfill the terms of the Practicum plan as agreed to by all parties: the Practicum Candidate; \_\_\_\_\_ NAME the Field Supervisor; \_\_\_\_\_ NAME and University BISC Course Lead \_\_\_\_\_ NAME.

The Field Supervisors will assume responsibility for supervision and assessment of the Practicum Candidate.

The Field Supervisors will provide a written assessment of the Candidates performance and these will be submitted to the BISC Practicum Coordinator at the end of the Practicum.

The BISC Practicum Coordinator will oversee activities of the Candidate and the Field Supervisor. The BISC Practicum Coordinator will be involved in the formulation of the Practicum plan, in the negotiation of the supervisory agreements, and in the assessment of the Practicum student's performance. The Practicum Coordinator will have regular (approximately monthly) contact with the Practicum candidate to review progress on goals, objectives and activities. This may be accomplished by telephone, email, Skype or face-to-face.

### Assessment

The Field Supervisor will provide the Coordinator with (a) a written assessment of the Practicum Candidate's performance. On the basis of the information received from the Field Supervisor and the score achieved on the written report, the BISC Coordinator will determine and recommend a Pass/Fail mark for the Practicum to the Certificate Program at the University of British Columbia by \_\_\_\_\_ DATE.

Practicum candidate: \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_

Field Supervisor: \_\_\_\_\_

BISC Coordinator: \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

7 February 2017

To: Senate  
From: Nominating Committee  
Re: A) Appointments to the President's Advisory Committee for the Selection of a Vice-Provost International  
B) Triennial Committee Review

---

### **A) Appointments to the President's Advisory Committee for the Selection of a Vice-Provost International**

The Senate Nominating Committee has received a request from Provost *Pro Tempore* Redish to appoint three persons to an advisory committee being formed pursuant to Joint Board-Senate Policy 18. Two of those persons must be faculty members and 1 must be a faculty member or a student. The Committee notes that under that policy additional members are appointed by the Okanagan Senate, the President, and the student unions.

In response to a call for nominations issued on 26 January 2017, 9 nominations were received. Personal statements and CVs were sought from all nominees. A list of all those nominated along with their submitted statements and background information on the nominees is available from the Committee's secretary.

In considering recommendations to Senate, the Senate Nominating Committee considered:

- Past and current service experience and background, including but not limited to search/hiring committee experience
- Familiarity with UBC, the position in question, international academic affairs, and post- secondary educational administration
- Discipline and demographic balance

The Committee has considered possible appointees, and is pleased to recommend:

*That Dr Paul Evans, Dr Merje Kuus, and Mr Shahid Abrar-ul-Hassan, be appointed to the President's Advisory Committee for the Selection of a Vice-Provost International.*

Mr Abrar-ul-Hassan, Shahid is a PhD Student in Teaching English as a Second Language in the Faculty of Education. Dr Paul Evans is a professor in the Institute for Asian Research and the Liu Institute for Global Studies, and Dr Merje Kuus is a Professor of Geography.

**B) Triennial Committee Review**

As noted last month, the Senate Nominating and Agenda Committees have established a website to aid in this triennium's review of Senate and Committee operations. This site can be found at <http://facultystaff.students.ubc.ca/vtriennial>.



15 February 2017

THE UNIVERSITY OF BRITISH COLUMBIA

Vancouver Senate

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OFFICE OF THE PROVOST AND VICE-PRESIDENT ACADEMIC

Phone 604 822 1261  
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February 3, 2017

To: Vancouver Senate

From: Angela Redish, Provost and Vice-President Academic *pro tem*

Re: **Report to Senate on External Reviews, 2015-16**

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**Item for information:**

For the information of the UBC Vancouver Senate, I am pleased to attach the annual report on External Reviews of Academic Units and Programs. The report covers the period of September 2015 through August 2016. It provides a summary of each external review undertaken (13 in total) and three accreditation reviews.

**Attachment:**

Report to Senate on External Reviews of Academic Units and Programs, 2015-16





## Report to UBC Vancouver Senate

### External Reviews of Academic Units and Programs, 2015-2016

Submission Date: February 3, 2017

Submitted by: Office of the Provost and VP Academic

External reviews were undertaken by UBC in the following academic units between September 1, 2015 and August 31, 2016. Accreditation reviews of programs and units are also included.

Key findings and recommendations made by the review teams, along with the Faculty and/or Department responses to the key findings and recommendations, are summarized on the following pages and comprise the remainder of this report.

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**School of Nursing**  
**Faculty of Applied Science**  
Summary of External Review: March 2016

Key Findings of the Review Committee:

- The School of Nursing at UBC offers strong programs and is known for research and teaching that have a strong emphasis on social justice.
- Students have been highly successful in licensure exam pass rates and employment and graduates are in demand.
- There is a thriving graduate program with 25 years of PhD education.
- Faculty research and scholarship is nationally and internationally recognized, and the School ranks third in the country among its peer institutions and in the top 30 of Schools of Nursing in the world.
- Faculty and staff are actively engaged in advancing the goals of the School and the University.
- In addition to its many strengths, there are also challenges to consider.

Key Recommendations and Unit's Response:

**Recommendation:** *A business plan for the new curriculum initiative (BSN Transformation), as well as other new programs going forward in the next five years, should be developed.*

**Response:** A business plan for the new curriculum initiative in the Undergraduate Program has been developed based on the proposed curriculum transformation and will be finalized after internal and external approval of the initiative. In addition, the School is in the process of getting approval for a second pillar for the MHLP Program for a January 2017 intake.

**Recommendation:** *Develop a plan to pursue further opportunities to engage with colleagues in Applied Science, UBC Health, and other Faculties to enhance collaborative research and innovation. Continue to participate in initiatives to enhance interprofessional education for UBC SON students.*

**Response:** The School intends to:

- increase the number of research grants and partnerships that include collaborations with units across UBC as well as across Canada and internationally.
- expand formal partnership between the School and international nursing programs through collaboration, exchange and publications.
- enhance mentorship to build research capacity with practice partners.
- increase stakeholders' engagement with faculty members' strengths and contributions.
- promote dialogue about health policy and system implications for community-involved research in diverse venues.
- increase the number of studies that integrate data from other countries.
- enhance innovative and effective inter-professional learning environments for students.
- promote and engage in diverse knowledge translation events locally, nationally and internationally for the public, practice-based and scholarly audiences.

**Recommendation:** *Improve communication and flow of information within the School.*

**Response:** The current communication plan is being reviewed and based on the results, a comprehensive communication plan will be developed. The School leadership team aims to enhance trust and be inclusive about budgets, strategic planning and management processes; however, access to and transparency of information must be balanced with respecting individuals' rights to confidentiality and privacy.

Additional Note from the Unit:

Following the external review, the School of Nursing had a two day retreat in June, 2016, facilitated by an external consultant. The challenges and recommendations outlined in the external review report have been addressed by this comprehensive strategic plan (en)VISION 2020.

**School of Nursing and Accelerated Advanced Standing BSc in Nursing (Path B)**  
**Faculty of Applied Science**

Summary of Accreditation Review: January 2016

Accreditation Body: Canadian Association of Schools of Nursing

**Key Findings of the Accreditation Team:**

- *The CASN Accreditation Bureau recognizes the strengths of the educational unit and nursing program as described in the self-study report.*
- *The School receives accreditation for another 7 years with an interim report in 2019 on the recommendations outlined below.*
- *The School receives accreditation for the baccalaureate program for another 7 years.*

**Key Recommendations and Unit's Response:**

**Recommendation:** *A report providing evidence of the unit's continued ability to deliver the nursing education program, and meet the unit's mission and goals in light of the financial constraints.*

**Response:** A business plan for the new curriculum initiative in the Undergraduate Program has been developed and will be finalized after internal and external approval of the initiative. The projected business plan for the new program delivery model decreases the gap in funding by about 20%. Other revenue streams are being explored in graduate education; the School is in the process of getting approval for a second pillar for the MHLP Program for a January 2017 intake (professional program with an expanded fee potential).

**Recommendation:** *A report providing evidence of the implementation of a human resources plan.*

**Response:** The School intends to:

- develop a human resource plan that outlines faculty needs and leadership succession;
- identify a plan for recruitment, retention, and support of present and new faculty including faculty orientation, mentoring, and professional development related to tenure track success;
- develop creative faculty positions such as the clinician scientist;
- mentor clinical assistants (clinical teachers) and clinical partners to consider broader teaching and leadership roles; and
- create Term or Endowed Professorships in collaboration with industry partners, including foundations and health authorities.

**Recommendation:** *A report providing an update on the unit's plans for ensuring adequate physical space to support the delivery of the nursing education programs.*

**Response:** The School is currently identified in the phase II building plan within the Faculty of Applied Science for space and has been in the top 3 on the capital planning list at the university for a building

(Community Center for Health Sciences, envisioning a hub for interprofessional practice, research, and education). The necessary government and donor support has not been realized. Our biggest vulnerability continues to be physical space, and attainment of more space for education and research has been one of our strategic goals.

Until plans for a new building can be realized our present strategies include:

- strategically examining our current space and reconfiguring areas to expand classroom and laboratory uses;
- enhancing technology in the classrooms and lab by applying for a capital improvement grant in the university and seeking external funders;
- partnering with academic and practice partners for lab use;
- collaborating with UBC Health partners to increase inter-professional and student/practitioner education; and
- exploring virtual reality options for simulation, modular learning, and cloud-based experiences.

A full report will be provided to CASN CAB on these three areas by August 15, 2019.

Additional Note from the Unit:

Following the CASN Accreditation, the School of Nursing held a two day retreat in June, 2016, facilitated by an external consultant to further develop a comprehensive strategic plan for the next five years. The challenges and recommendations outlined in the CAB accreditation report are addressed in the strategic plan document (en)VISION 2020.

## Faculty of Arts

### Summary of External Review: September 2015

#### Key Findings of the Review Committee:

- *The reviewers observed an outstanding Faculty that richly merits the confidence and support of the UBC administration. Particular strengths were noted in commitment to teaching excellence, and innovation and ongoing reflection on and assessment of curriculum and pedagogy, across the Faculty.*
- *Advising in Arts is handled well, particularly given such a large and varied set of programs and students. It was questioned why students do not need to declare a major until third year.*
- *The Faculty should continually review the large number of interdisciplinary programs for relevance, strength and viability, and is planning an upcoming review of these programs.*
- *The largest question facing graduate programs in Arts has to do with the lack of academic placements for PhD graduates – particularly true in the Humanities but applicable across the Academy.*
- *The Faculty is commended for encouraging First Nations and Aboriginal learning and research, including bringing together the First Nations & Indigenous Studies Program and the First Nations and Endangered Languages Program in a new Institute for Critical Indigenous Studies, and excellent hiring. The reviewers encourage hiring more Aboriginal faculty members for these programs.*
- *Some staff reported that lean budgets and shrinking staff size have created challenges as they endeavor to continue to provide the high level of service that Faculty and students expect.*
- *More can be done to support and encourage research in the Faculty. Achievement of the university's national and international goals will require a strong contribution from the Faculty of Arts, and this in turn requires strong promotion and recognition, at the institutional level, of Arts' research successes.*
- *The reviewers flagged a pressing problem, that the provincial government has been rejecting applications for CFI matching funding for projects focused in the humanities and social sciences.*  
[Note: The university is committed to working with the province to demonstrate the significance and value of all forms of research funded by CFI.]
- *The reviewers noted the Faculty's progress in addressing the previous recommendation that "UBC and the Faculty of Arts... develop mechanisms or models that will better encourage and reward teaching across Faculties." In particular the Master of Public Policy and Global Affairs was praised as a good example of using this potential to develop good connections between Faculties.*
- *Language programs might benefit from being combined into one "unit", or the establishment of a state-of-the-art language-teaching facility, but this would need to be carefully predicated on the Faculty's deep commitment to language teaching.*

#### Key Recommendations and Faculty's Response:

**Recommendation:** *The Faculty should investigate the desirability of encouraging students to declare majors in second year or earlier.*

**Response:** We currently allow our students to declare the major anytime after the end of the first year of study and until the end of the second year of study. While some departments are already working on a plan to encourage early declaration of the major, other units recently signaled their willingness to consider doing the same, and so we will work on moving the expectations for declaration more visibly toward the end of the first year of study. Our 4-year programs such as the Bachelor of Media Studies and Bachelor of International Economics have direct entry in first year.

**Recommendation:** *The Faculty and the Office of the VP Research should provide additional support to faculty members developing Tri-Council and other external grant applications, ideally through assigning at least one additional staff person to this task.*

**Response:** We are keen to assist research teams in securing large grants and building sustainable projects. Seed funding is available through internal Arts grants. The Faculty also provides matching funds for Partnership Grant applicants, and encourages departments to do the same. To help researchers develop independent funding over the life-cycles of Tri-Council grants, we will work with them to develop partnerships and secure support where appropriate.

**Recommendation:** *The Dean and Provost should continue to examine the organization of the Faculty of Arts with the goal of establishing an administrative structure that is practical and sustainable, while also making sense from an academic perspective.*

**Response:** In progress. We have been resistant to promoting mergers that do not proceed from a reasonable agreement of the parties concerned and a sense of academic objectives, but we have seeded a number of active discussions of unit amalgamation, and are planning as creatively as possible within the confines of Senate policy to reduce the number of small unit reports in Arts.

**Recommendation:** *The Dean's Office should initiate a broad discussion of the future academic structure for language and literacy programs, drawing on all appropriate existing expertise, with the aim of developing an integrated framework for the delivery of language training to the Faculty and the larger university.*

**Response:** In progress. The Dean's Office has created a TLEF grant in collaboration with our five units that offer language instruction to advance language pedagogy and language learning technology, supervised by a Committee called Curriculum Renewal in Arts: Language Teaching and Learning. We do not believe that a global language instructional institute or school is in keeping with UBC's approach to languages, literatures and cultures.

**Recommendation:** *The Dean's Office should undertake a broad review of First-Year programs, including service courses offered to other Faculties, with the aim of facilitating better coordination of programs and their delivery, and ensuring that all full-time and part-time faculty have an appropriate academic "home" unit.*

**Response:** Well underway. We appointed a coordinator of First-Year Programs, provided a staff position, and are in year two of a three-year study of how best to leverage these programs for a maximally impactful first year for our students and as a component of a distinctive and marketable UBC Arts curriculum.

**Recommendation:** *Provide best practices for continuing reviews for 12-month lecturers with an eye to consistency and fairness. Consideration should be given to opportunities for term-limited faculty to participate in shared governance as appropriate.*

**Response:** We have shifted toward greater utilization of 12-month lecturer contracts rather than per-course sessional lecturer appointments, and we will work with departments to promote best practice and to ensure periodic performance evaluation. Regarding the role of 12-month lecturers in governance, we have flagged this issue for discussion by the heads and directors, and will attempt to reach consensus on how to promote inclusion given very different roles of contract faculty and different models of governance at the unit level, as well as limitation in the Collective Agreement. Some departments already include representatives of the 12-month lecturers in faculty meetings.

**Department of Asian Studies****Faculty of Arts**

## Summary of External Review: April 2016

Key Findings of the Review Committee:

- *The Reviewers praised the Department for its stellar research reputation, describing it as ‘the top research program in Asian Studies in Canada’, especially with respect to ‘humanities-oriented fields of Asian Studies’, and said that the graduate program is “impressive.”*
- *Reviewers also lauded the depth and breadth of instruction in the Department, especially related to languages. The range of languages goes far beyond those normally taught in Asian Studies (Chinese, Japanese, Korean, and Hindi-Urdu), and the Department has taken it upon itself to offer a range of classical and modern languages from across Asia (Punjabi, Persian, Cantonese, Classical Chinese, Classical Japanese, and Sanskrit).*
- *Reviewers noted both the large number of students enrolled in Asian Studies courses (10,000) and the steady growth rate in enrollments, agreeing with the forecast of 10-12% yearly growth.*
- *Reviewers found a considerable rise in morale amongst faculty and staff in the department since the last external review.*

Key Recommendations of the Review Committee:

- *The Department needs to continue building morale, via a two-pronged approach of promoting equity and developing a coherent strategy. The committee noted that service assignments are made disproportionately, with women doing the bulk of departmental service. The Department should devise some method of more equitable service distribution.*
- *The Department should develop a collective vision for the future. This would require engaging in planning exercises to define the Department’s boundaries and priorities, identifying key areas of strength and collaboration, and devising mechanisms to facilitate future growth.*
- *Asian Studies would serve faculty and students by strengthening ties to related units in Arts - specifically the Institute for Asian Research; History; and Classical, Near Eastern, and Religious Studies, the last of which should be approached to develop a program in Religion.*
- *The Department should actively pursue hiring faculty in the following four areas: a) Indo-Persian and/or South Asian Islam, c) Chinese language, d) Japanese language, and e) Chinese Literature and Translation Studies.*
- *By developing an MA Program in Translation in Asian Languages, which would be unique in North America, the Department could capitalize on its current assets to achieve distinction.*
- *Language courses should enroll no more than 15-20 students as recommended by ACTFL and the MLA. The Dean’s Office should ensure that this does not negatively influence the Department’s K-factor.*
- *Asian Studies should work with the Development Office to secure external funding to pursue a number of different projects, including expanding the Asian Centre to accommodate all Asian Studies faculty, and to make it a central space for all Asia-related activities campus-wide.*

Department’s Response:

The Department was pleased with the report and its recognition of strengths in research and teaching, but felt that the report did not fully appreciate the extent of the Department’s accomplishments. In light



of scholarly output, teaching, research funding, and graduate training and placement, Asian Studies should not only be seen as a leader in Canada, but in the world. Further, for a number of reasons, Asian Studies should be central to UBC's planning and outlook, and in prioritizing Asian Studies, the University 'will be building its own institutional identity and prestige.' The Department's response also addressed each of the recommendations raised by the review, as described below:

- The Department's view is that what the review committee described as a 'culture of grievance' is in fact rooted in structural and historical issues beyond the Department's control. Much of the grievance results from contracts currently issued to sessional and 12-month lecturers that do not accommodate long-term employment. The Department recommends that the University work to devise longer-term contracts for such instructors to give them more job security. The Department recognizes that women carry a disproportionate service load. However, they wish to point out that service is rewarded through course release and taken into account in recommendations for merit.
- Regarding strategy, the Department feels that the University and the Dean of Arts should first articulate their own, larger strategy with regard to Asia in general and Asian Studies in particular. This strategy should identify Asia-related assets across the University, and clarify the University's intentions with respect to Asia. Asian Studies can then develop a strategy that fits within that vision.
- Asian Studies already has strong relations with the IAR, though its overtures to History have been so far unrequited. The Department is glad to report that the Dean of Arts is working on developing an interdisciplinary program in Religion.
- The Department agrees that a hire in Indo-Persian/South Asian Islam should be made, and has been advocating for such a position for several years. The Department believes that this is an ideal time to make such a hire, given that a program in Religion is under development. The Department confirms that searches for Instructors in both Japanese and Chinese Language are currently underway.
- The Department is happy to pursue new programs like the MA in Translation Studies suggested in the review, but such programs will require a faculty lead and administrative support. This would require that the Faculty approve the Chinese Literature and Translation Studies hire suggested in the review, and that an additional Associate or Assistant Head be appointed to oversee such programs.
- The Department believes that the review committee may have been misinformed about how the K-factor works in Asian Studies. In fact, there are two separate K-factors; one for language courses, and one for ASIA-prefix courses. TA allocations work on a separate algorithm that does not mirror the K-factor. This results in language courses receiving fewer TAs than needed. The Department requests that the Dean's Office develop a TA algorithm that mirrors the dual K-factor in Asian Studies.
- The Department agrees that the Asian Centre is in need of renovation, believing that the problem has reached 'crisis proportions'. The Department is happy to work with Development for this and other projects, but feels that the renovation should be a priority issue for UBC's central Development team.

#### Faculty's Response:

With respect to TA allocation, the Faculty's funding model is based on the number of enrolments in sections with 40 or more students. The shortage of TAs in Asian Studies appears to be related to the allocation of TAs to language courses that fall under this 40+ enrolment threshold. We are working with the Department to review resource allocation for language classes, and as noted have also authorized two Instructor searches. Other requested tenure stream growth positions are being reviewed in the Faculty's annual budget review process. The Faculty has agreed to work with Arts Development to identify fundraising opportunities related to renovating the Asian Centre.

**Arts Academic Advising Services****Faculty of Arts**

Summary of External Review: May 2016

Key Findings of the Review Committee:

- Reviewers were effusive in their praise for the Unit, lauding it for both the import and the high-quality of the work performed.
- An extended quote summarizes the Reviewers' impression of the Unit: "All staff including directors, advising staff, and advising support staff, are extremely committed to their roles and responsibilities. They are welcoming and professional and are recognized for the leadership role that they have undertaken university-wide. They are viewed as being open to adopting new practices, thereby becoming role models for other advising units on campus. It was abundantly clear that they are a high functioning group of people who integrate principles of continuous improvement and reflection into their day-to-day practice."
- Reviewers regularly discussed the practical constraints under which the Unit functions, citing a student-to-advisor ratio of 1200:1. The Reviewers believe that this is an unsustainable ratio that is well above best practice, and will lead to advisor 'burnout.' The Reviewers also noted that the physical space is currently inadequate for the Unit to function efficiently.

Key Recommendations of the Review Committee:

- Reviewers felt that the Unit is under-resourced, both in terms of staffing and physical space. With respect to staffing, Reviewers suggested that the Unit should aim to have a student-to-advisor ratio of 600:1, as per a recent NACADA publication. This would require hiring seven new advisors. Reviewers warned that the current ratio is not sustainable, and discourages practices, like the one presently engaged in by AAAS, in which student peer advisors handle sensitive documents and serve as first points of contact. The additional hires will mean that AAAS will need to move to a larger space.
- Reviewers felt that the Unit needs to develop a vision grounded in a clear mandate, and supported by a set of protocols. This would help the Unit become pro-active and, among other things, identify and make use of relevant information technologies like predictive analytics, develop a more interactive web presence, and create advising tools that could be digitized and easily accessed by students. By doing so, the Unit could provide more targeted and differentiated advising, based on student need. That, however, would first require the Unit to have clearly defined protocols, and to formalize processes that currently have various levels of ambiguity, like transfer credits and letters of concession.
- Reviewers suggested revising the current governance model and restructuring the Unit toward greater efficiency. Concretely, the Director position should have more interaction with the Dean's Office, and an Associate Dean should take on a more direct role in advising. The Reviewers felt that AAAS had roles with unnecessary bifurcations – like the split between 'international' and 'domestic' advisors – that increase inefficiencies. Greater efficiency would also ensure that advisors are not involved in extraneous activities, like recruitment, that drain vital resources.
- Reviewers encouraged the Unit to support its members in pursuing professional development programs. Such programs are vital to keeping current with best practices, creating a stimulating work environment, and planning for the future.
- The Reviewers made a plea that the Unit be spared from any budget cuts.

### Unit's Response:

AAAS was highly appreciative of the Reviewers' laudatory comments, and their suggestions for expansion in terms of capacity and space. The Unit noted that early conversations with the Dean's Office following the review have been highly encouraging, and that the Unit has already begun to implement several of the recommendations. The Unit responds as follows to the recommendations noted above:

- The 600:1 student-to-advisor figure is a median ratio that reflects the advising practices of vastly different institutions, and does not necessarily reflect the particular needs of UBC Arts. Instead, the Unit suggests moving to a ratio closer to 900:1, with multiple modes of advising (drop-in, sit-down, web-based, etc.) and a resource model that accommodates for peak and trough times of the academic year. The Unit accepts the recommendation against peer advisors serving as first points of contact and handling sensitive material. The Unit will continue to resource peer advisors but re-assign them to ensure privacy and resolve potential conflicts of interest. The issue of physical space can only be addressed once the additional hires have been made.
- With respect to strategic vision, the Unit was enthusiastic about developing clear mandates and protocols, but noted that such planning would need to be in consultation with other Units, the Dean's Office, and the University as a whole. Similarly, creating set protocols on concessions and transfer credits is contingent on UBC's legacy systems, and any attempt to move forward must be part of a broader discussion involving the University's SASI implementation. The Unit is participating in these discussions and will continue to do so.
- The Unit respectfully disagreed with many of the Reviewers' structural suggestions. The Unit viewed the current Director position as an asset, and worried about having, for example, an Associate Dean import Advising responsibilities into already-full portfolios. The Unit also disagreed with removing the distinction between International and Domestic advisors, which the Unit feels reflects distinct needs of different student populations at UBC. The Unit disagreed with the recommendation that advisors not take part in recruitment events, as their presence at these events introduces advising early, conveys information to large groups, and encourages students to seek advising once on campus.
- The Unit encourages members to take advantage of professional development funds and to take part in development activities. The ongoing problem is time, and the Unit is taking steps to protect a certain amount of advisors' time for the purpose of professional development.
- The Unit noted that the Dean's Office agreed not to make any budget cuts for the current fiscal year, and AAAS is now invited to make requests directly to the Dean's Office as part of the Faculty's annual budget review process.

### Faculty's Response:

The Faculty agrees with the Unit's responses with respect to the role of the Associate Dean (who is supporting the Unit in undertaking a strategic planning exercise), separate international and domestic advisors, and advising staff's involvement in international student recruitment. With support from the Excellence Fund, the Faculty added one additional advising staff position in the 2016-7 academic year, and is likely to add further resources when the budget process for 2017-8 is completed. We also will provide additional IT and communications support, as noted in response 2 above. However, before moving fully to a 1:900 ratio, the Dean's office requests that the Unit strategize about the ideal student-to-advisor ratio for Arts, including the potential mix of developmental and transactional advising, particularly the potential for the latter to be delivered with greater efficiency online.

**Clinical Psychology Doctoral Program****Faculty of Arts**

Summary of Accreditation Review: November 2015

Accreditation Body: Canadian Psychological Association

**Key Findings of the Accreditation Team:**

The review was highly laudatory, citing the program as a ‘powerhouse’, and praising faculty and students alike. In particular, the committee congratulated the program on:

- *using evidence-based methods to prepare students for clinical practice;*
- *making supplemental instruction in fields related to psychology readily available to students;*
- *valuing diversity in teaching and training;*
- *enacting programming changes based on student feedback;*
- *providing students with strong mentorship from experienced faculty;*
- *using cutting-edge information technology for teaching, training, and research.*

The review panel noted some ongoing developments in the program that they would like to be updated on in the future, including:

- *partnership programs with Simon Fraser University;*
- *efforts to help students fulfill the “History of Psychology” core course without the need for taking a standard lecture course; and*
- *initiatives to ensure that students continue to have adequate research space.*

Included below are the Review Report’s key recommendations along with responses from the Clinical Psychology Program (February 2016):

**Key Recommendations of the Accreditation Team:**

- *recruitment initiatives for new faculty members, specifically to replace the retiring Dr. Linden;*
- *improving the regularity of core-area course offerings, especially in light of the program’s current reliance on sessional instructors;*
- *addressing the rise in average programme completion time from 7.3 years in 2010-2011 to 8.8 years in 2014-2015;*
- *plans to include a faculty theoretical orientation on the program website; and*
- *responding to student dissatisfaction with practicum preparation.*

**Program’s Response:**

- A search to replace Dr. Linden was successful, and the Program hired Dr. Joelle LeMoult to fill the position.

- The Program only uses sessional instructors when necessary to offer required courses, and most clinical courses are taught by clinical faculty in the Program. Clinical faculty teach approximately eight of the program's courses per year, most of which are in core areas. Sessional instructors are only hired to teach courses in areas of expertise not currently covered by clinical faculty, and only about one sessional per year is hired to this end.
- It is true that time to completion has increased, but the Program notes that students are well-funded throughout their time at UBC. The average funding for full-time students is \$29,198, which encourages some students to spend more time enrolled, and the work that students conduct in this extra time is consistent with the Program training goals.
- The Program's website now includes information on faculty theoretical orientation.
- Students do not always get their first choice of practicum in their early years due to structural issues related to the number of available practica. However, the Program is highly successful in placing students in top-tier practicum sites, with a match rate of 86% over 5 years. The number of hours spent in various practicum sites and the high match rate suggests that, though early-year students may be dissatisfied, students are well-prepared and highly satisfied by the time they graduate.

Outcome:

On June 8, 2016, the CPA Accreditation Panel for Doctoral Programmes and Internships in Professional Psychology recommended *re-accreditation for a period of 6 years* for the UBC Clinical Psychology Program.

## Faculty of Education

Summary of External Review: November 2015

### Key Findings of the Review Committee:

- *The Faculty is highly ranked and is highly regarded locally, nationally and internationally.*
- *The committee was impressed by the level of support by Faculty members, students and administrators for the directions that the Faculty is taking under its current leadership, noting a strong and collaborative spirit. The reviewers heard acclaim for the Dean's achievements, inclusiveness and tenacity.*
- *Education research is facing many challenges across the world as economic conditions become difficult. The Faculty has been making efforts to increase research support and encourage scholarship, and is reaching out to partner with scholars in other disciplines.*
- *The Faculty has embarked upon a plan to refresh its programs and enhance its capacity to meet future needs, and there is an expanding number of dual degree programs. Supporting new digital educational offerings will require dedicated leadership and creative investment strategies. Of concern is the large postgraduate student population and the Faculty's capacity to support it appropriately.*
- *The Teacher Education program now offers preparation for the Montessori Program and the International Baccalaureate - clear evidence of responsiveness to local need – and is strengthened by the required course in Aboriginal education and recent integration of mental health literacy. External stakeholders indicated that graduates are well-prepared and in high demand by local schools.*
- *Aboriginal scholarship, programs and community engagement within the Faculty are exemplary and historic. The recently-established Professorship in Indigenous Education in Teacher Education, and MOOC "Reconciliation through Indigenous Education" which had the highest completion rate of all UBC MOOCs, are examples of the Faculty's strong leadership in Indigenous education.*
- *The Faculty is working to address budgetary concerns and space deficiencies, and to generate revenue through philanthropic activities.*

### Key Recommendations and Faculty's Response:

**Recommendation:** *Consider recalibrating the leadership and services offered in the Research portfolio to support faculty in new types of research endeavours.*

**Response:** There is an opportunity to further calibrate the senior leadership team and related support services with the strategic mission of the Faculty, and to achieve operational efficiencies. There has been significant expansion in research infrastructure (services and expertise) in the past 3-5 years and further investment is proposed. The Faculty has prioritized multisite and partnership research proposals, jumping from 0 to 6 applications over two years.

**Recommendation:** *The Faculty should consider the size of the graduate program and its relationship to the core mission of the Faculty.*

**Response:** The Faculty is devoting attention to aligning the numbers of graduate students and graduate programs to the core mission of the Faculty, and, in particular, to its research mission. There is also a need to discuss related issues such as active recruitment of highly competitive graduate students and postdocs; quality of graduate supervision and supervision loads; and differentiation between graduate

programs/degrees that have a primary focus on professional preparation or research preparation. At present these decisions are primarily left to departments and programs, and we would benefit from further collaborative engagement across the senior leadership team including program coordinators, on the desired balance between professional oriented and research oriented graduate admissions.

**Recommendation:** *The Faculty and University must consider ways to increase the complement of academics in the area of Aboriginal/Indigenous education. As the MOOC offering may begin to generate resources, these funds might assist in establishing much needed additional academic positions.*

**Response:** The current Associate Dean Indigenous Education is completing an environmental scan of Indigenous education within the Faculty. The various departments and schools within the Faculty have some innovative and ambitious plans for new Indigenous education programs and research clusters, which require additional faculty. The environmental scan reinforces this recommendation of increasing the number of indigenous faculty in the area of Aboriginal/Indigenous education.

**Recommendation:** *The Faculty should continue re-structuring its administrative team to achieve its goals in a sustainable way. Specifically, it is recommended that the Faculty reconsider the need for a full-time Senior Associate Dean for International Relations. Such activity could be taken by other Associate Deans, or by a manager working to establish international relations connections.*

**Response:** The recalibration of the senior leadership team includes attention to the “International” portfolio. Having a senior academic in a leadership role with “international” in the title is very important in the sustainability, credibility and expansion of our international engagement activities. A “manager” is certainly required to support many of these initiatives. Prospective international partners expect to work with someone in a leadership position who knows a great deal about academic programs and university structures and policies, and who can negotiate/ collaborate with faculty members and senior leaders at the university and in our community engagements.

**Recommendation:** *The Faculty should pursue creative engagement with alumni around expertise/services as well as fundraising.*

**Response:** An alumni engagement strategic plan was produced for the Faculty to identify/create opportunities for alumni to share their expertise. The Education team works to connect recent graduates to regional alumni for assistance and networking and launched a LinkedIn group for Education alumni. A Department of Language and Literacy alumni chapter was formed and plans to host 2-3 events annually. Opportunities are being identified for alumni to participate in ProD programs, workshops, and online forums.

**Recommendation:** *The budget of the School of Kinesiology should not be separated from that of the Faculty, so its central administration can have a better control over the finances. The Faculty should create mechanisms to reward financially those units [such as] the School of Kinesiology that attract more revenues for the Faculty.*

**Response:** The Faculty wholeheartedly supports the argument that it needs to be very adept with Finances generally, and that the centralization of many Finance functions improves compliance with basic University policies and provides efficiencies. However, the Faculty would like to proceed with caution before folding the School’s budget into the Faculty budget. The Faculty will review the School of Kinesiology budget model and work with the Director to determine the appropriate budget model that will align Kinesiology’s budget with that of the other academic units in the Faculty.

## Faculty of Forestry

### Summary of External Review: November 2015

#### Key Findings of the Review Committee:

- *The Dean's leadership has enhanced the Faculty's prominence internationally and reflects positively on UBC. The Dean makes great effort to be transparent and reach consensus before a major decision is made. There is clarity in organizational structure and reporting relationships.*
- *Additional communication about budget and resources from the Dean's Office to the Faculty would enhance Faculty members' understanding of financial matters.*
- *The Faculty would benefit from more inclusivity in major university decisions.*
- *The environment and culture seem healthy, and in general faculty are productive, engaged, supportive, professional and collaborative. Gender diversity has been expanded and there is a good balance in the ages of faculty members and by discipline. Staff morale is high.*
- *Faculty has a good research reputation at home and abroad. There are effective collaborations on research proposals with the Faculties of Science and Applied Science. Additional collaborations with other faculties would be beneficial.*
- *The movement towards accepting foreign students is strategically beneficial for the university and the province, and it is helpful that international student tuition rates supplement the domestic student tuition given the comparatively small enrolments in the Faculty.*
- *At the same time, there has been recent growth in enrolment which has resulted in expanded class sizes and this is creating inconveniences in teaching that will need to be addressed.*
- *The Faculty is already engaged with First Nations and there are opportunities to expand on this.*

#### Key Recommendations and Faculty's Response:

**Recommendation:** *Look at new teaching methods including large lectures with graduate student-led discussion sessions and/or online lectures for some classes.*

**Response:** The Faculty is exploring new pedagogical techniques and has received a number of grants from the Teaching & Learning Enhancement Fund to do so. The Faculty has been recruiting more instructors who are being asked to play a leading role in developing the Faculty's teaching. The Faculty will take advantage of the CTLT Faculty Associates program, and look at whether some courses would be better offered online than face to face.

**Recommendation:** *Perhaps by use of a space audit, develop and present needs for classrooms and labs.*

**Response:** This is constantly under review by our Space Committee. Some of the classrooms are managed by the Faculty and some are centrally managed and scheduled. The Faculty's continued growth is now being constrained by space needs and the working environment for both students and Faculty members will deteriorate if solutions are not found.

**Recommendation:** *Develop several ways of communications, including "listening sessions," so that faculty, staff and students can better understand the operations and management of the Faculty.*

**Response:** Currently, operations and management information is provided in several ways (Department meetings, Faculty Council meetings, Faculty "Town Halls", weekly e-news). Based on this recommendation, new methods for internal communication, including feedback sessions with students,



are being explored, and where appropriate, will be introduced to facilitate better feedback opportunities from students, staff and faculty members.

**Recommendation:** *The Provost and Deans could make a greater effort to ensure the Faculty is always included in appropriate decisions.*

**Response:** We welcome any such participation and have advocated modifications to the current Provost model that would result in more direct involvement of faculties in the affairs of the university.

**Recommendation:** *Diversify the countries of origin for international students to reduce risks of lack of students if one country should curtail the ability of students to travel abroad.*

**Response:** We agree that there is a need for this and we are exploring the possibility of recruiting students from other countries, particularly from Southeast Asia, with several new agreements currently under development.

**Recommendation:** *Become the leader of UBC's team working in the area of Indigenous Engagement.*

**Response:** We fully concur with this recommendation and would be pleased to work with the First Nations House of Learning as a Faculty champion for the development of UBC's Indigenous engagement. We have several initiatives underway to increase involvement in First Nations and other Indigenous issues and in the past 12 months, almost one million dollars has been given or pledged to support Aboriginal students in the Faculty.

**Recommendation:** *Cross-fertilization of ideas within the Faculty is key; find several methods of doing this, as one is not usually enough.*

**Response:** The Faculty is looking at ways to implement this recommendation. We are looking to expand our research seminar series. A recent success has been themed meetings; these have so far occurred on urban forestry, Aboriginal research, and research in China. All three attracted significant numbers of faculty members and resulted in efforts to coordinate between initiatives and research projects.

**Recommendation:** *Within the strategic plan, increase targeted funding goals for development to meet some of the recommendations included in the report.*

**Response:** This is an important recommendation as many of the suggestions made by the review panel will result in increased expenditures. Over the past five years the Faculty has doubled its annual funds raised compared to pre-2011 levels. The Faculty has increased its fund-raising goals and is widening its search for potential donors.

**Recommendation:** *The Faculty should develop a strategic plan for communications.*

**Response:** The Faculty will initiate a review of its current communication and marketing strategy and, based on the results of this, will develop a comprehensive communication plan.

**Recommendation:** *Undertake curriculum mapping for each program.*

**Response:** Based on this recommendation a more formal procedure with clear feedback mechanisms will be investigated and implemented. This process has been started by mapping Aboriginal content in the undergraduate programs.

**Recommendation:** *Each professional Master's program should have a strategic plan with a business plan for revenue generation, for which they should be held accountable.*

**Response:** We fully concur with this recommendation, and a committee has already been struck to review the strategic and business plans of each professional program.

**Master of Sustainable Forest Management Program**  
**Faculty of Forestry**

Summary of Accreditation Visit: April 2016

Accreditation body: Society of American Foresters

Key Findings of the Accreditation Team:

- *Overall, the design of the MSFM program is very tightly focused on development of competencies required for professional forest resource management and administration. The visiting team observed that the level of critical thinking and integration skills developed is significantly higher than achieved in many, if not all, 4-year BSc programs in Forestry in North America with which they are familiar.*
- *Recruitment activity has been primarily via the program web site and word of mouth. This has been adequate to develop a student cohort size of 15-20 students. The Faculty is aware of the need to be more active in recruitment and is currently working on a plan.*
- *The quality of instruction in the MSFM program is excellent as a result of outstanding faculty and staff that are responsible for program instruction; UBC is arguably one of the best, if not the best, Faculty of Forestry in the world. Courses are therefore taught by the most knowledgeable faculty available anywhere.*
- *Students enrolled in the program expressed satisfaction with the quality of instruction, and the individual attention they receive and to which they have access, as needed. Based on our on-site visit, it is evident that all faculty and staff involved take teaching seriously, and that their means of evaluating teaching quality and responding to concerns is effective and has resulted in module and course improvement over the four years since program initiation. Individual faculty said that they love to teach because it is an important way for them to have a positive impact on students, the forestry sector, and the world.*
- *It is evident that teaching quality is excellent at the Faculty of Forestry and MSFM program and that UBC's status as a research-intensive university does not detract from the seriousness with which faculty and staff address their teaching responsibilities.*
- *It is noteworthy that the program was originally designed to satisfy the standards and competencies required for accreditation by the Canadian Forestry Accreditation Board (CFAB).*
- *It is also clear that MSFM program administrators, faculty and staff are closely linked with the forestry profession and the forest sector and graduate employers, and that this interaction has been important from the outset and continues to inform decisions concerning program improvement. The principles of adaptive management – plan, do, check, review – are well understood and being practiced in the UBC Faculty of Forestry.*
- *Through various discussions, it appears there may be opportunity for clarity within the program for desired number of students. Currently the program is constrained by classroom space at 25 students. It appears a consensus that 25 is most likely the most appropriate student cap as the program is currently structured before quality would begin to deteriorate. To significantly expand the program, very careful thought would need to be given on how to ramp up the program without sacrificing quality. With further internal discussion to clarify exactly what the annual enrollment target is, along*

*with who the target audience is, a more formal and active recruitment/marketing plan could be developed.*

- *Observations indicated that advising goes well beyond normal academic advice giving the best possible chance at success for the student and program. The program director's and coordinator's level of commitment, passion, and enthusiasm for the program and the students was a consistent theme throughout the various discussions. It was clear without a program champion and dedicated program coordinator, this program would have difficulty maintaining the quality and ongoing success. Students indicated access to all staff was welcomed and regularly used. Having dedicated office space for students in the building and in close proximity to staff was noted as extremely beneficial.*
- *The program is well resourced and supported within the Forestry Faculty and within the larger University. The program space, staff, equipment, and field lands are phenomenal. The quality and number of staff are impressive and they are competitively compensated. Administration and staff have committed the required teaching time, energy, equipment, and space for the program. Alternative administrative structures should be approached with caution. Discussion of an alternative multi-year instead of annual funding structure should be considered.*
- *No conflicts between the SAF accreditation standards and local, provincial, or federal laws governing the institution and degree programs under review were identified.*
- *The MSFM web page includes a link to profiles of recent graduates and also includes testimonials from employers of MSFM graduates. However, there is no collated data on graduation/employment success presented. [Unit responds: The webpage includes a statement concerning the percentage of graduates who have found employment and a pie-chart showing their employment by sector.]*
- *The Committee on Accreditation will review the Visiting Team Report, Faculty response, and other relevant material in November 2016. The Committee's decision will subsequently be conveyed to UBC.*

#### Unit's Response:

The report clearly and accurately describes the nature of the Master of Sustainable Forest Management program and the UBC and Faculty of Forestry institutional context. We look forward to meeting the Committee on Accreditation at the Society of American Foresters' AGM in November 2016.

#### Outcome:

In January 2017 the SAF granted accreditation to December 31, 2021.

**Department of Cellular and Physiological Sciences**  
**Faculty of Medicine**

Summary of External Review: October 2015

**Key Findings of the Review Committee:**

- *The Committee was impressed by the unanimous support for the Chair who has brought needed stability to the leadership of CPS and skillfully led it through a number of challenging issues. Dr. Hammond has indicated that he does not wish to continue as Chair beyond his current mandate which ends in 2016, so it is critical to initiate a new search as soon as possible. CPS has yet to undertake a formal strategic planning exercise since 2009, but has identified a number of priorities.*
- *CPS faculty members continue to make substantial innovative and essential contributions to several and very diverse education programs offered by the Faculties of Medicine and Science. The Gross Anatomy Facility, which services many programs in the Faculty of Medicine, is considered a unique strength of CPS and should be preserved and supported with appropriate resources. Training of graduate students is also a strength of CPS faculty members, though issues of identity and cohesion amongst its trainees materialized as an unintended consequence of the dissolution of its graduate program in favour of interdisciplinary graduate programs. The Department has a strong track record in training postdoctoral fellows but this could be enhanced by offering a broader mentorship and career development program. The current undergraduate Honours program, while of high quality, is at risk due to low enrollment.*
- *CPS has a distinguished record of achievement and excellence in basic biomedical research, with noted strengths in diabetes, neuroscience, cancer and cardiovascular research. Adjusting to changes in the grant funding schemes offered by CIHR poses a significant challenge, especially for junior investigators.*
- *The Department appears to be generally well-managed, though some strains have emerged with the implementation of the new Financial Cluster Model.*
- *Sustainability is difficult to address in the absence of a strategic plan, but many of the operations of CPS are at risk in the current climate of budgetary restraint, including faculty recruitment in light of pending retirements, education programs supported by the Gross Anatomy Facility, and new infrastructure for the undergraduate teaching laboratory to support a needed revival of that program.*
- *Continuing the record of research and teaching excellence will depend on the successful recruitment of new Leadership and securing adequate resources, internally and externally, to address many of the issues outlined in this review, and will also need commitment from the Faculty and University.*

**Key Recommendations and Department's Response:**

**Recommendation:** *That the Faculty of Medicine, in partnership with the Faculty of Science, initiates a broad consultation process on how to best redesign its departments that makes pedagogic and administrative sense and empowers faculty, staff and students to operate more effectively in a rapidly changing scientific landscape and that is increasingly collaborative and multidisciplinary.*

**Response:** This recommendation recognizes the complexity of the Department's contributions to undergraduate teaching in the Faculty of Science and the Medical Undergraduate Program, as well as in

several other academic units at UBC. The complicated administrative and financial framework is difficult to manage and not well understood. In addition, graduate training and research are conducted primarily within multi-disciplinary graduate programs and research groups within the LSI. While there are positive aspects to the latter, they do not promote a sense of identity for faculty members and trainees within CPS. As the review team suggests, it seems timely to re-evaluate the department's role in the context of a changing scientific and pedagogical landscape, especially in the context of the Faculty of Medicine's strategic planning process.

**Recommendation:** *That the Department - upon installation of a new Chair - develops a detailed 5-year strategic plan for teaching, research and administration of its academic programs. Many of the elements of this plan are evident in the Cyclic Review Document, but need to be formalized and ratified following broad consultation with its faculty and staff. With several pending retirements, this will be an opportune time to build on existing strengths or forge new areas of scientific inquiry. This document will serve as a template for discussion with the leadership of the Faculty of Medicine and its partners (i.e., other research centres and hospital authorities).*

**Response:** The Department recognizes the importance of developing a strategic plan. This will need to be undertaken in the 2016-2017 academic year and will also be guided by the outcome of the Faculty of Medicine's strategic plan and decisions emerging from recommendation 1.

**Recommendation:** *That the Department undertakes processes to boost morale and sense of identity of its faculty, staff and trainees.*

**Response:** Boosting morale is recognized as critically important during times of change. The Head provides regular updates at monthly faculty meetings, as appropriate, and will encourage CPS faculty members to participate in decision making processes at all levels, as these changes unfold.

**Recommendation:** *That CPS and the University commit to the development and implementation of a CAPS majors program. This would give greater exposure of the discipline amongst the undergraduate students and recognition of other possible graduate career choices.*

**Response:** This is recognized as a priority that will reinvigorate cellular and physiological science courses for undergraduate science students and offer students with greater opportunities to broaden and tailor their learning experiences to suit a wider range of future career options. The Department is committed to introducing a CAPS Majors Program alongside its Honours program during the 2017-2018 academic year, which would require approval from Senate and the Ministry of Advanced Education.

**Recommendation:** *That a culture of collaboration be actively fostered with activities leading to establishing stronger links among Life Sciences Institute faculty and with other research centres and hospitals. A leadership position for this role should be identified.*

**Response:** There are very strong links between research faculty within the LSI; however, it is acknowledged that relationships between CPS research faculty based in the LSI and others who are primarily appointed in other departments, and based in other UBC-affiliated research institutes, is under-developed and that there are huge opportunities through resolving this. The Department has actively encouraged affiliate membership from off-campus faculty members in other Departments and Institutes, but more emphasis will be placed on this. The Department believes this should emerge as a priority in the Faculty of Medicine strategic plan. We also believe that it will require a leader to champion this, and the Department commits to support such an initiative.

**Department of Dermatology and Skin Science**  
**Faculty of Medicine**

Summary of External Review: January 2016

**Key Findings of the Review Committee:**

- *The Department of Dermatology is by all accounts a highly functioning unit with a history of outstanding leadership and vision, particularly in the past two decades.*
- *The Department has a highly productive research program both in terms of output and attracting high quality researchers.*
- *It is the only Dermatology Department / Division in Canada which has successfully bid for hosting the World Congress of Dermatology (WCD) in 2015 and only the second North American academic unit to host the WCD in the 126-year history of the WCD.*
- *With approximately 90% of the province's practising Dermatologists as members of the Department Faculty, this represents the most successful provincial recruiting effort in Canada, and speaks strongly to the leadership of the Department and the high level of engagement within the Department.*
- *In publications, the Department has excelled on the international stage with over 300 journal papers and 28 books or chapters published in the past 5 years. Many of the books and chapters are found as core reference material in both training programs and clinicians' offices worldwide.*
- *With a recent review by the Royal College of Physicians and Surgeons resulting in intent to withdraw status for the training program, the Department as a whole has united to correct the identified shortcomings, improve the overall program, provide an excellent curriculum, and maintain a positive milieu for training the Dermatologists of the future while enhancing the experience for Faculty.*
- *The retention of Department status is critical for the ongoing success that the current Department Head has built over the past 10 years, and Dr. David McLean in the years before this. There is unequivocally a huge benefit for both the Department and the Faculty of Medicine at UBC to keep the current status – from a regional through international perspective. Reverting the Department to a Division would have serious and long-term repercussions in terms of faculty engagement and academic performance.*

**Key Recommendations and Department's Response:**

**Recommendation:** *The Department should receive help to search for untapped resources to support research and Faculty appointments/positions.*

**Response:** Although the Department has been highly creative in leveraging resources from multiple sources, we appreciate the reviewers' recommendation regarding additional opportunities in philanthropy and new models for academic support in the context of clinical service delivery, especially in the areas of rural dermatology and teledermatology.

**Recommendation:** *Support the ongoing collaborative clinics and services of the Department; encourage new collaborative initiatives locally, regionally, nationally and internationally.*

**Response:** All of the clinics and services that the Department has helped to establish over the last two decades have been constructed using a collaborative and integrated model. Although the overwhelming

majority of dermatologic services have relatively low and modest resource requirements, they deliver highly positive and measurable patient outcomes. Our academic mission has been fulfilled and evidenced by the tight integration of teaching and research with service delivery. We definitely look forward to renewed support from the University and health authorities throughout the province.

**Recommendation:** *Select a new Department Head who can maintain the momentum that the current Head has established. Several excellent internal candidates have been identified; however, there are a number of external candidates in the Dermatology sphere who have demonstrated superb leadership and vision. The current Department Head can assist the Dean in identifying these individuals.*

**Response:** The process for searching for the next Department Head was initiated in May 2015 but this search was put on hold by the Dean's Office in August 2015 pending this external department review. The review has identified key priorities for the Head as the Department begins its second decade of operation. UBC's medical school is in the enviable position of recruiting an individual to lead what is considered the top dermatology unit in Canada, and one of the best in North America. There are a number of excellent candidates who will be able to provide this leadership and our Department members are eager to restart the process that was initiated almost a year ago.

**Recommendation:** *Support the Department in exploring the possibility of more collaboration possibly through more collaborations within Experimental Medicine and Vancouver Coastal Health Research Institute if these would be of benefit to the Department.*

**Response:** When the Department was created, there was an explicit understanding that we would draw on existing structures with proven excellence and efficiency such as the Experimental Medicine program. We would not create our own stand-alone graduate program in Dermatology. Several graduate students from our program successfully complete the Experimental Medicine program each year. This program has an emphasis on biomedical research that is wet lab-based. Our department is also able to draw on several other graduate programs at UBC that closely match our PIs' capabilities including the Interdisciplinary Oncology Program, the Biomedical Physics Program, the School of Population and Public Health, and the UBC Engineering School. One concern that our investigators have raised is the fact that the Experimental Medicine program is increasingly constrained by financial challenges. This coupled with ever-tightening external grant funds means that funding of graduate students may diminish. This challenge is mirrored, however, by all departments in our medical school.

The Department is grateful for the longstanding and generous support of our research program by VCHRI. We have excellent research facilities right across the street from the VGH Skin Care Centre. We are aware of an opportunity to seek a greater role within the structure of VCHRI, and we will put together an application towards that end.

**Recommendation:** *Develop and pursue philanthropic resources to ensure financial sustainability of the Department and the ability of the Department to ensure adequate space resources and support staff.*

**Response:** We have several ongoing projects and prospects that are being worked on through the UBC Development Office and our hospital foundations. An additional area that we've identified is the large group of alumni in dermatology, many of whom are now entering their retirement year. We will work towards engaging those individuals not only for financial support but also teaching, networking, and mentorship.

**Department of Medical Genetics****Faculty of Medicine**

Summary of External Review: November 2015

**Key Findings of the Review Committee:**

- *The Department is essentially an overarching umbrella structure, below which sit the following vital and largely thriving groups of people and programs:*
  - *The Interim Department Head, Dr. Marco Marra, has been in the role since January 2015.*
  - *The Academic faculty are highly productive researchers geographically and thematically dispersed among several UBC multidisciplinary research centres. Currently 33/46 (72%) are Full Professors while only 5/46 are Assistant Professors. Sustainability is a serious concern as three will likely retire in the next five years and another six in the next ten years; the UBC central budget will only be able to fund two new recruitments unless new funding sources are identified.*
  - *The 39 Clinical Faculty are primarily based at BC Women's Hospital. The clinical Medical Genetics Program reports to the VP BC Women's Hospital-PHSA and to the UBC Department Head.*
- *The Department has many strengths, including: the quality and impact of its research, many high-profile faculty who are decorated with awards, strong graduate and postgraduate training programs in both medicine and science, a highly competitive MSc program in Genetic Counselling, and a busy and growing provincial program in medical genetics. The commitment to academic excellence is apparent in every aspect of the Department. The faculty members are passionate, hard-working and proud to be members of the Department. They are supported by a capable and dedicated but small administrative group.*
- *The challenges facing the Department are complex and to a large extent dependent upon an external environment that they do not control; thus progress on several recommendations made in 2010 has been slow. Leadership turnover has been a further challenge. The most time-sensitive priorities are:*
  - *Recruit a permanent Head with an executive leadership council that will enable the Department to integrate and lead research, education and clinical activities in a strategically cohesive and sustainable manner.*
  - *Encourage the Department to develop a vision and sense of common purpose that is shared between UBC and its affiliated hospitals.*
  - *Develop a succession plan to recruit new faculty to replace at a minimum those who will retire.*
  - *Increase emphasis on research knowledge translation through more collaboration between academic faculty, clinical faculty and provincial diagnostic laboratories.*
  - *Recognize and support the Department's outstanding Genetic Counselling Program; this will be a "growth industry" and UBC is uniquely positioned to do something very innovative if the program received better support and recognition.*

**Key Recommendations and Department's Response:****Recommendation:** *Recruit a permanent, strong leader for the department.***Response:** This is a critical priority for the Department. To attract the best possible candidate, Department members have clearly articulated their preference that an international search be



conducted. The Department is eager to work with the Faculty and the BC Women's Hospital & Health Centre leadership team on the recruitment.

**Recommendation:** *The graduate program is strong, but has the potential to be stronger. To address the issue of competition for outstanding graduate students, the department should consider ramping up its recruiting efforts – increased web presence, hosting a recruiting day for accepted students, etc. To strengthen the sense of community, department-wide educational activities should be increased.*

**Response:** The Department has been working on, and continues to work on, enhancing its web presence. Technical support from MedIT, as well as access to communications professionals in the Dean's Office would greatly benefit the Department in this endeavour. A recruiting day with defined deliverables, an empowered agenda, and a suitable budget should be considered. Recently, the Department's Graduate Advisory Committee has reallocated GSI funding to develop "mini-rotation" programs to enhance the competitiveness of our graduate program; such have proven to be successful in recruiting high-caliber trainees at other universities and research centres.

A significant factor limiting the expansion of the graduate program, with respect to clinical research activities including genetic counseling research, includes limited access of clinical faculty members to appropriate funds. Until the serious shortfalls in protected academic time and grant funding for clinical and translational research faculty are addressed, for example, there are limited opportunities for expansion in this area.

**Recommendation:** *The Department, though geographically and functionally distributed among multiple sites, should be preserved and energies focused on new research initiatives and emerging leadership opportunities (UBC campus-wide, Faculty of Medicine and Health Authority) that will also better unify this fractionated department. Excellence in Genome Science and Medicine should be a strong UBC brand. The Department is ideally positioned to become the poster child for what success could look like for an Academic Health Sciences Network. Multiple stakeholders will need to work together to make this happen. The greatest challenge over the next 5-10 years will be sustaining the Department's level of excellence in research. Given current fiscal challenges at UBC, this group must be prioritized for unique alternative funding sources such as CRCs and new philanthropic opportunities.*

**Response:** The Department is home to world leaders in genomic medicine; the opportunity for the University, Faculty, PHSA and the other Health Authorities, and possibly the AHSN to increase in prominence and impact is real. To deliver on these important opportunities, the Department looks forward to support for the recruitment of a new Head. The recruitment of an exceptional leader is critical and presumably will involve access to diverse funding sources, such as CRC Chairs and philanthropic sources of revenue, as identified by the reviewers.

**Recommendation:** *Fiscal challenges at UBC mandate that a new funding model be pursued with high priority if the productivity and global impact of this accomplished Department is to be sustained and if the Faculty and the University are to improve their world rankings.*

**Response:** The Department is eager to explore new funding models that would result in enhancements to its productivity and global impact. We recognize that the absence of young faculty within Departmental ranks is a major concern with respect to the sustainability of the unit, as is the reliance on external "Partner" funding for faculty salaries. Resources that would enable the Department to recruit outstanding junior faculty members are essential to the continued success of Medical Genetics and could form part of the recruitment package offered to a new Head.

## School of Population and Public Health

### Faculty of Medicine

Summary of External Review: November 2015

#### Key Findings of the Review Committee:

- *The School was formed in 2008 and now comprises 68 full-time faculty, 77 Clinical, 67 Associate, and 33 Adjunct Faculty, and approximately 350 graduate students - a quarter of those in the Faculty of Medicine, across seven academic programs. This is the first UBC external review of the School.*
- *The Review Committee met many passionate faculty and staff, all of whom believe that SPPH is a place of excellence and should be very important to the mission of UBC. It offers a wide variety of courses and programs. The diverse faculty offers students an incredible wealth of expertise and overall excellence in teaching and research that has been well recognized outside of UBC.*
- *The faculty still do not, on the whole, primarily identify themselves as part of the School, rather with their own research unit/centre or education program. This may merely reflect the fact that the School is still 'new' and was an amalgamation of many different parts.*
- *The recent reorganization of SPPH with 4 home faculty Divisions complementing the existing interdisciplinary (Research) Centres seems to have gone well, with the Divisions meeting regularly, the Division Heads understanding their roles and responsibilities, and the Divisions serving as 'glue' for keeping natural groupings of faculty working together.*
- *Generally, stakeholders have a very positive view of SPPH and consider it to be a valuable part of the Faculty, UBC and the community for its research successes and the significant public health positions held by its graduates. There is pride in the expertise SPPH holds in Aboriginal health, occupational and environmental health, as well as the success of its centres such as CHSPR, HELP, and CEIH. The professional program offerings are strong.*
- *Research: Faculty are well published and highly successful at obtaining competitive major grants as well as holding research chair positions.*
- *There was a fairly widespread view that the School's current Vision, Mission and Goals are not ambitious enough; at the same time there was a sense that in an era of fiscal restraint the School needs to take stock and clearly identify the core areas in which it will invest in its limited resources.*
- *There is general recognition of the potential for fund-raising based on high-profile nature of SPPH's work, but little sense that the SPPH is on the priority list of the Faculty or central development.*

#### Key Recommendations and School's Response:

**Recommendation:** *Organizational structure – re-evaluation of the current complex system would be beneficial to both faculty and staff.*

**Response:** While substantial progress has been made through our divisional re-organization, further simplification is clearly possible. (We agree that the organization chart shown to the reviewers was confusing and have already modeled a simpler one). Some feedback to the review included the opinion that some elements of simplification, especially with respect to re-organization of academic programs, have been slowed up. "A few vocal faculty and staff have hobbled the process of streamlining". The School will review its needs and organization with respect to the size of its faculty and student populations and the complexity of its programs and complete the work of re-organization laid out as an objective of our 2013-18 strategic plan.

**Recommendation:** *Faculty input – forums or town halls for faculty need to be organized so that faculty have the opportunity to discuss openly issues as well as strategies to address the School's fiscal situation and future, including the pros, cons and requirements of potentially becoming a stand-alone Faculty.*

**Response:** SPPH faculty, staff and students embrace this idea. In addition, they voiced that town-halls can be supplemented by surveys and small group consultations to assure we hear from less vocal members of our community. The first town halls will deal with updating the School's vision and research priorities and at least two should occur during 2016. The question of becoming a stand-alone faculty is not in our hands alone but interested faculty will be encouraged to develop a discussion paper taking into account the opinions of all of their colleagues. Several respondents to the review paraphrased, "If it ain't broke, don't fix it." More generally, the Divisions have been and will continue to provide an opportunity for key issues to be discussed. These discussions will continue to be brought to SPPH Executive through the Division Heads.

**Recommendation:** *Hold focused strategic planning session(s) to create a more engaging Vision for the School.*

**Response:** SPPH is 2.5 years into a 5-year plan and has achieved 60-70% of objectives. The current plan is intended to be a living document so that this recommendation is welcome encouragement to consider additional elements in setting our strategic goals. We like the idea of focused work on renewing vision.

**Recommendation:** *Research priorities strategic planning: Decisions about breadth vs depth need to be made as this is fundamental to the School's direction.*

**Response:** We will review research priorities (breadth vs depth) and research support within town hall meetings.

**Recommendation:** *Review education program curricula content to ensure balance between core and elective offerings is correct and relevant to students. This needs to be an ongoing regular review process.*

**Response:** We are happy to act on this recommendation and some of this work has been underway recently. We are taking a critical look at smaller courses as some will need to be removed from the calendar, though their content could be available as directed-studies material. We are looking at ways to value and incentivize teaching in core courses and large sections. We have a curriculum review committee and will make this calendar review a regular process.

**Recommendation:** *A plan with all stakeholders should be developed to ensure revenue opportunities from the professional program offerings balance growth with capacity and quality.*

**Response:** We agree.

**Recommendation:** *Public education strategy about the role of public and population health: Ideally the new UBC President should be engaged in this endeavor as well as the current public health officers in BC, all of whom are alumni of the School.*

**Response:** We welcome this emphasis and see it as key. Many of our faculty members are already engaged in public health knowledge translation through collaborative work with health authorities, government and through the media. We are well aware that we can do more and will consider this in our planning. We met with the interim president in January 2016.

**Department of Psychiatry**  
**Faculty of Medicine**  
Summary of External Review: January 2016

**Key Findings of the Review Committee:**

- *The Department of Psychiatry is large (there are approximately 500 clinical faculty members) and complex. Within the Department there are 5 Divisions and 12 Programs. Division and Program Heads have a variable, wide range of responsibilities and resources. Levels of support are highly variable, and determined in many cases by history rather than alignment with the Departmental Strategic Plan.*
- *Despite the large number of clinical faculty members, there are only approximately 35 academic faculty members in the Department, and only 11 of these are psychiatrists. In contrast to the clinical faculty, which has a heavy representation of junior individuals, nearly 60% of the academic faculty are Full Professors – this represents a serious challenge for recruitment and rejuvenation.*
- *The current Head has done an excellent job running a large and complex department during times of fiscal constraint and in the face of numerous other challenges. He has moved things forward, has tried to solve significant and growing problems, and has made efforts to reach out to clinical faculty and the distributed medical program, to support research, and to reach out beyond the Department.*
- *Trainees are upbeat and optimistic and feel that the Department leadership is responsive to their concerns. It is noted that this is a contrast to the past, when a number of issues existed. The trainees generally feel that the program prepares them to practise in the community. They recognize and appreciate the efforts that have been made to permit those trainees not in a primary research stream to get involved in research projects. It is noted that the training program is very large and has expanded dramatically over the last few years. The ability to keep pace and the improvement in resident morale reflect the efforts of the residency program director and department leadership.*
- *The Department is strong in research, with \$66M in funding since 2012. There is a very strong and internationally recognized program in basic neuroscience. It is felt that there are opportunities for greater integration and collaboration between the Department and several of the relevant Centres and Institutes, including opportunities for shared recruitment. There are also opportunities for collaboration between strong groups that are somewhat isolated – e.g., Addictions and the HIV group. Mentorship arrangements for junior faculty are variable and some feel this is left to them to arrange.*
- *There is increased transparency in how the Department is run and in its finances. The administrative staff feel supported by the Chair and by each other, but are working under ever-increasing stresses.*

**Key Recommendations and Department's Response:**

**Recommendation:** *The reviewers noted opportunities for collaboration with the Provincial Health Services Authority and the BC Mental Health and Addictions Research Institute, and suggested these be pursued more aggressively. As well, the reviewers expressed surprise that the academic Head of Department was sometimes not involved with the appointment of Hospital Heads, or with committees bridging the Health Authorities and the Ministry of Health.*

**Response:** The BC Mental Health and Addictions Research Institute has seen a period of transition, as PHSA has assumed responsibility for research management on the Oak Street academic campus. As PHSA defines and clarifies the organization and structure of research activities on the Oak Street

campus, and the role of research within BC Mental Health and Substance Use Services, the Department hopes to renew the previously very active and mutually beneficial partnership. The Department appreciates the attention given to the relationships between the Department and the Health Authorities. Psychiatry has experienced similar challenges as others in the Faculty of Medicine. We remain committed to creating value for our partners in the Health Authorities, and hope for deeper engagement where an academic perspective can improve the ability of the Health Authorities to accomplish their missions.

**Recommendation:** *Through greater engagement with partners outside of Vancouver, the reviewers recommended that all psychiatry residents receive part of their training outside of the Lower Mainland. The Interior Health Authority was specifically mentioned.*

**Response:** The Department of Psychiatry was the first UBC Faculty of Medicine Department to establish dedicated, specialty residency positions at three of the four distributed sites (Fraser, Vancouver Island, and the North). This required expansion of the residency training program to become the second largest in Canada. The expansion created challenges in recruiting residents, and in assuring the availability of academic and clinical faculty members for education and for clinical supervision. The most recent, Faculty-wide Royal College accreditation visit mandated an external review of the Residency Program in April, 2016. We hope that the significant changes made to the organizational structure of the program will meet with positive responses. The Department will carry out a review of the success of mandated rural and remote training of residents (as existed pre-expansion) compared with the current model, in encouraging newly graduated psychiatrists to practice outside the Lower Mainland. Following a period of stability of the program, and if a funding mechanism is available, the Department will revisit the possibility of further expansion that could include the Interior Health Authority.

**Recommendation:** *that junior academic faculty have a more formalized mentorship arrangement, and that Clinical faculty be provided with more training and support.*

**Response:** The Department approach to mentoring new faculty is to assign a mentor at the time of appointment. As the mentor is outside of the process for Merit evaluations, re-appointment, or tenure and promotion decisions, this is “informal”. We hope that this actually represents a strength of the approach, implemented to be consistent with the Faculty recommendations established by the previous Vice-Dean. The Faculty has increased the role of the Continuing Professional Development Office. The small amount of funding available from the Departmental budget to support CPD has more recently been used to bring in external speakers to promote best practices in supervision and education.

**Recommendation:** *that the Department “focus further on the collaborative and integrative opportunities currently available at UBC and the broader community.” Further integration was recommended specifically with “(i) the Djavad Mowafaghian Centre for Brain Health; (ii) the broader neuroscience community; (iii) and CHEOS”.*

**Response:** The Department and the UBC Institute of Mental Health are fully open to expanded collaboration and alignment of objectives with the many parties that value psychiatry. That being said, the faculty members of the Department remain committed to the distinct role for Psychiatry as a specialty of medicine, with the responsibilities and authority for training medical students and residents in this specialty, in carrying out research on mental illness, and in supporting our partners in the Health Authorities to deliver the highest quality of psychiatric care.

**Department of Botany****Faculty of Science**

Summary of External Review: November 2015

**Key Findings of the Review Committee:**

- *“There has been and still is a strong departmental commitment to the full breadth of botanical science, including teaching and research on microbial, cryptogamic and phanerogamic plants in freshwater, marine and terrestrial environments. The present faculty continues this rich tradition of excellence in botanical research. Four of the more senior research professors are Fellows of the Royal Society and there certainly is no shortage of other significant awards and honors at all ranks.”*
- *“Unlike many plant-based departments that have focused on specific areas over the years the Botany faculty have maintained research area diversity (Marine/Microbial, Ecology & Evolution, Cell & Molecular). This intellectual diversity trickles down even to undergraduate teaching.”*
- *“The undergraduate biology program curriculum had progressed significantly since the 2010 external review. The BioFlex project was implemented over two years and involved restructuring courses using evidence-based pedagogies to promote student learning both inside and outside formal classrooms. The initial impact of this effort is impressive, in part, because it involves approximately 2000 students and 14 instructors, 3 Science Teaching and Learning Fellows, 28 Graduate Teaching Assistants, and 22 undergraduate Peer Tutors.”*
- *“The review team was impressed with the research facilities of the Department in particular the Beaty Biodiversity Museum, the renovated wings and the UBC Bio-imaging [Facility]. The Beaty Biodiversity Museum, which includes the Herbarium, is impressive and appears to be an excellent outreach facility to all UBC personnel and the general public at large. The Museum staff is very competent and had come up with innovative solutions to functional glitches in the building design, which always exist in the development of a new facility.”*
- *“The Department has developed a strategic plan in the context of the 2010 review, which covers the years 2015-2020. These include goals in the areas of research, undergraduate education and management and engagement. Overall, the strategic plan touches on many important areas and these are expanded upon in the self-study.”*

**Key Recommendations of the Review Committee:**

- *Strategic Planning - Create a transparent, living strategic planning document that can be referenced on a semi-annual basis perhaps at departmental retreats, to examine progress as measured against the strategic plan.*
- *Undergraduate education – Identify funding to support teaching postdoctoral fellows beyond the Carl Wieman Science Education and Flexible Learning Initiatives to further advance the Department’s teaching, learning and biology education scholarship efforts. Undergraduate biology classes should make greater use of local resources such as the Botanical Garden and the Herbarium (part of the Beaty Biodiversity Museum).*
- *Graduate education – The graduate program structure and oversight should be made more transparent for students. Graduate students are well supported for the first four years of their PhD*

*study, but funding in subsequent years is less; the Faculty of Science should fund a fifth year of graduate studies. The career development of post-doctoral fellows should be supported and efforts made to engage this community more with the department.*

- *Faculty and staff - Encourage and facilitate sabbaticals or other forms of renewal for the teaching faculty. The review committee recommends the hiring of a plant ecologist, perhaps with training in physiological ecology or functional ecology, and strongly endorses hiring in cell and molecular biology in anticipation of retirements in this area.*
- *Research infrastructure - Better leadership and resources are required from the University and Faculty of Science to support bioinformatics and bio-imaging across campus.*

#### Department and Faculty's Response:

- Strategic planning - This is an important exercise for the department to “articulate specific, measureable outcomes for the goals that were outlined in the self-study document.” Measurable outcomes linked to the strategic plan have been developed by the Department and are now reviewed and discussed annually at the Department retreat.
- Undergraduate education - The Faculty of Science has identified resources to support post-doctoral teaching and learning fellows in each Department. Progress is being made at incorporating local resources into Biology classes through UBC's community-based experiential learning office and in partnership with the education coordinator for the Beaty Museum and Botanical Garden.
- Graduate education – Efforts are underway to improve communications with the graduate student and post-doctoral communities to increase awareness of graduate regulations and opportunities for funding and professional development. The Faculty of Science currently funds Ph.D. tuition for the first four years of graduate study. Funding of Ph.D. tuition for a fifth year is currently under discussion, and will be prioritized against faculty renewal and other funding requests.
- Faculty and staff – Study leaves for teaching faculty are supported with resources from the Faculty and Department. Efforts are being made to increase the support for faculty employing active learning pedagogies and classroom technology. The Department is currently conducting a search for an assistant professor in plant ecology and is casting a broad net to secure a diverse pool of applicants. Developing a transition plan for the cell and molecular biology cohort is a high priority for the new Head.
- Research infrastructure – University and Faculty support for bioinformatics research have been increased dramatically through the Sequencing and Bioinformatics Consortium, the Advanced Research Computing (ARC) initiative, and the Data Science Institute. Identifying additional resources, including industrial support, for cross-campus bio-imaging facilities remains a work in progress.

**Department of Chemistry**  
**Faculty of Science**

Summary of External Review: November 2015

Key Findings of the Review Committee:

- *“The Department of Chemistry at UBC is one of Canada’s largest Departments” that extends “beyond the traditional chemistry sub-disciplines [to include] chemical biology, materials and polymer chemistry, and catalysis [that] attract new graduate students [and] allow for growth and participation by Faculty members in larger programs and provide access to new funding streams. UBC Chemistry faculty members show a clear commitment to the overall success of the Department and its well-being. The teaching faculty feels the environment for instructors has improved over the last five years. The collegial atmosphere in the Department continues to be a strength and reason for the overall positive nature of the faculty.”*
- *“UBC Chemistry is privileged to have a highly dedicated staff. Appreciation for their contributions to the success of the Department was very clearly apparent from the Department leadership team, faculty, teaching stream staff, and students.”*
- *“There is strong evidence for teaching excellence in the Department. A large cohort of teaching stream staff (Instructors) has joined the department in recent years, and has driven significant innovation, especially in laboratory-centric courses. Students found their instructors to be responsive, and felt there was a wide range of research opportunities within the department.”*
- *“The Department offers M.Sc. and Ph.D. degrees in Chemistry, and has a current graduate enrolment of nearly 200 (just over 140 enrolled in the Ph.D. program), the largest graduate program on campus.”*
- *Key concerns raised by the review committee include stretched fiscal resources, the high cost of housing in Vancouver, low provincial support for graduate student scholarships compared to other Canadian research universities, and outdated physical infrastructure for undergraduate teaching and research.*

Key Recommendations of the Review Committee:

- *The University and Faculty of Science should invest major funds to renovate or replace Chemistry’s B- and C-wings (teaching buildings) and to modernize the research A-wing [Chemistry-Physics building].*
- *The Faculty of Science / University should provide additional financial resources to the Department to address the structural deficit and to allow the Head to address important issues.*
- *Among other recommendations, the Department should build strength in areas at the interface of chemistry, review its committee organizational structure and establish a single point of contact for lab renovations, and reverse the decline in undergraduate majors.*
- *The Department should work with the Faculty and University to enhance existing graduate programs and add new ones. Three areas can be identified: (i) Fellowship funds/signing bonuses to attract the best graduate students (i.e., those already holding or highly likely to obtain Scholarships/ Fellowships), (ii) a commitment to enhance funding available to fifth-year Ph.D. students, and (iii) a reduction in the number of hours per semester required of full-time TAs in Years 1-4.*



Department and Faculty's Response:

- The replacement of Chemistry's teaching buildings (B- and C-wings) ranks among UBC's highest priorities and is on the university's 5-year capital plan that was submitted to the Province. The Wesbrook building will become available in summer 2018 to provide much needed swing space for the construction project should funding be identified. In response to concerns raised in the external view, an audit confirmed that there are no existing health and safety issues regarding these buildings. The renovation of the HVAC systems in A-wing is underway. Additional work will need to be done to address other infrastructure issues in A-wing.
- The Faculty of Science has substantially increased the Department of Chemistry's annual budget to defray the costs of faculty and staff salary increases, and to increase graduate student support. The Department is projecting a modest budget surplus for FY16-17.
- Under the leadership of the new Head, the Department is following up on the specific Department-level recommendations of the external review committee.
- In 2016, the Department increased the funding packages offered to the best NSERC applications in order to enhance graduate student recruitment and has committed to funding the fifth-year tuition for PhD students. The salary and number of hours worked by graduate teaching assistants is set by the union agreement with the university. The administration continues to advocate at the provincial level for increased graduate student scholars.



3 February 2017

To: Vancouver Senate

From: Dr. Kate Ross, Registrar

Re: Election Results

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### **Convocation Representatives to Senate**

Further to the call for nominations for members of Convocation to fill the twelve (12) positions for representatives of the Convocation on the Vancouver Senate issued in November 2016 and closing on January 31<sup>st</sup>, 2017 twelve (12) valid nominations have been received. Therefore pursuant to Section 15 of the *University Act* the following convocation members are acclaimed as elected as representatives of the Convocation on the Vancouver Senate for terms beginning on September 1<sup>st</sup>, 2017 and ending August 31<sup>st</sup>, 2020 and thereafter until successors are elected:

- Tariq Ahmed – LIB 2008
- Lawrence Burr – BA 1958, MSc 1961, MD 1964
- Andrea Dulay – BA 1993, B. Ed. 1997, M.Ed. 2001
- Benjamin Fischer - BSc 2009, BScN 2011
- John H.V. Gilbert - Professor Emeritus
- Séan Haffey - BA 1990
- Haymen Leong – BA 2011, BEd 2008, MA 2011
- William B. McNulty – BPE 1968, MPE 1970, MA 1984
- Sarah T. Ngo – BA 2003
- John D. Shepherd – BSc 1976
- Mike C. Stewart – JD 2014
- Richard C. Tees – Professor Emeritus