

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

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

#### Vancouver Senate

## THE EIGHTH REGULAR MEETING OF THE VANCOUVER SENATE FOR THE 2013/2014 ACADEMIC YEAR

#### **WEDNESDAY, 16 APRIL 2014**

6:00 P.M.

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

1. Senate Membership – Dr Kate Ross

New Student Representatives for 2014-2015 (information) (circulated)

2. Tributes Committee – Dr Sally Thorne

Memorial Minutes for Ms Susan Cates-Dodson and Dr Sheldon Cherry (approval (circulated)

- 3. Minutes of the Meeting of 19 February 2014 Prof. Stephen J. Toope (approval) (circulated)
- 4. Business Arising from the Minutes Prof. Stephen J. Toope
- 5. President's Remarks Prof. Stephen J. Toope
  - a. Presentation of Certificates of Appreciation for Student Representatives from 2013 to 2014 (information)
  - b. Activity Report for 20 January 2014 to 14 March 2014 (information) (circulated)
- 6. Correspondence Dr Kate Ross

Receipt of Petition Regarding UBC Animal Research (information)

7. Candidates for the Degree of Master of Digital Media – Prof. Stephen J. Toope

The list as recommended by the Great Northern Way Campus and the Faculty of Graduate and Postdoctoral Studies is available for advance inspection at Enrolment Services and will also be available at the meeting.

The Chair of Senate calls for the following motion:

That the candidates for the degree of Master of Digital Media, as recommended by the Faculty of Graduate and Postdoctoral Studies, be granted the degree effective upon the concurrence of Simon Fraser University, Emily Carr University of Art + Design, and the British Columbia Institute of Technology; and that a committee comprised of the Registrar, the Dean of the Faculty, and the Chair of the Senate be empowered to make any necessary adjustments.

(2/3rds majority required)

#### 7.1 Topic of Broad Academic Interest – Ms Kiran Mahal

Student Mental Health: Fostering a Healthy Academic Environment to Support Student Wellbeing and Academic Success (information) (circulated)

The Senate Agenda Committee recommends that 30 minutes be allocated to this item.

#### 8. Academic Policy Committee – Dr Paul Harrison

- a. Amendments to Grading Practices for the Faculty of Dentistry (approval) (circulated)
- b. Clarification in Policy for Masters' Degree Requirements (approval) (circulated)
- c. Restructuring of the Graduate Council of the Faculty of Graduate and Postdoctoral Studies (approval) (circulated)

#### 9. Admissions Committee – Dr Robert Sparks

- a. English Language Requirements for Vantage College / ELS EAP Level 112 (approval) (circulated)
- b. International Undergraduate Student Enrolment Policy (approval) (circulated)

#### 10. Admissions & Curriculum Committees – Dr Robert Sparks/Dr Peter Marshall

- a. New Degree Program: Master of Community and Regional Planning (approval) (circulated)
- b. New Degree program: Master of Engineering in Naval Architecture and Marine Engineering (approval) (circulated)
- c. New Degree Program: Doctor of Pharmacy (Entry-to-Practice) (approval) (circulated)

#### 11. Curriculum Committee – Dr Peter Marshall

- a. Curriculum Proposals for March 2014 from the Faculties of Graduate and Postdoctoral Studies (Arts, Dentistry, and Land and Food Systems) (approval) (circulated)
- b. Curriculum Proposals for April 2014 from the Faculties of Applied Science, Arts, Education, Graduate and Postdoctoral Studies (Education, Medicine, and Pharmaceutical Sciences), Law, Pharmaceutical Sciences, and Science; and UBC Vantage College. (approval) (circulated)

### 12. Nominating Committee – Dr Rhodri Windsor-Liscombe

- a. Establishment of an Ad Hoc Committee on Flexible Learning (approval) (circulated)
- b. Election of the Vice-Chair of Senate (approval)

#### 13. Student Awards Committee – Dr Sue Grayston

- a. Vantage College Award Revisions (approval) (circulated)
- b. New and Revised Awards from March 2014 (approval) (circulated)
- c. New and Revised Awards from April 2014 (approval) (circulated)

#### 15. Proposed Agenda Items

Notice of Motion: To form a Senate Standing Committee for Athletics and Recreation (information) (circulated) – Dr Stanley B Knight

#### 16. 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

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



#### The University of British Columbia - Vancouver Senate

#### **Members of Senate**

Effective 1 April 2014

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Chancellor	Ms Sarah Morgan-Silvester
President, Chair	Prof. Stephen J Toope
Secretary	Dr Kate Ross
Academic Vice-President	Dr David Farrar

#### DEANS OF FACULTIES

DEANS OF FACULTIES		
Applied Science	Prof. Marc Parlange	
Arts	Dr Gage Averill	
Commerce and Business	Prof. Robert Helsley	
Administration	1 101. Robert Heisley	
Dentistry	Dr Charles Shuler	
Education	Dr Blye Frank	
Forestry	Dr John Innes	
Graduate and	Dr Susan Porter	
Postdoctoral Studies		
Land and Food Systems	Dr Murray Isman	
Law	Prof. Mary Anne Bobinski	
Medicine	Dr Gavin C.E. Stuart	
Pharmaceutical Sciences	Dr Michael Coughtrie	
Science	Dr Simon Peacock	
-	·	

#### PRINCIPALS OF COLLEGES

College of Health Disciplines	Dr Louise Nasmith
College for Interdisciplinary Studies	Dr Hugh Brock

#### ELECTED BY THE FACULTIES

ELECTED BY THE FACULTIES		
Applied Science	Dr William Dunford	
Applied Science	Dr André Ivanov	
Arts	Dr Mark Vessey	
Arts	Vacancy	
Commerce and Business	Dr James Brander	
Administration	Dr Dan Simunic	
Dontistmy	Prof. Bonnie Craig	
Dentistry	Dr Lance Rucker	
Education	Dr Donal O'Donoghue	
	Dr Nancy Perry	
Fanatur	Dr Sue Grayston	
Forestry	Dr Peter L Marshall	
Graduate and	Dr Philip Loewen	
Postdoctoral Studies	Dr Lawrence Walker	
Land and Food Systems	Dr Gwen Chapman	
Land and Food Systems	Dr Andrew Riseman	
Law	Dr Benjamin Goold	
Law	Prof. Bruce MacDougall	
Medicine	Dr Kenneth Baimbridge	
Wedicine	Dr Peter Leung	
Dharmagautical Sciences	Dr Ujendra Kumar	
Pharmaceutical Sciences	Dr Fawziah Marra	
Soionao	Dr Santokh Singh	
Science	Dr Don Witt	

## ELECTED BY THE FACULTY OF THE COLLEGE FOR INTERDISCIPLINARY STUDIES

Vacancy Vacancy

#### ELECTED BY THE JOINT FACULTIES

Dr Richard Anstee	Dr Katharine Patterson
Dr Peter T Choi	Dr Ronald Reid
Dr Wendy Hall	Dr Robert Sparks
Dr Paul G Harrison	Dr Sally Thorne

Dr William McKee Dr Rhodri Windsor-Liscombe

#### ELECTED BY THE CONVOCATION

Mr Tariq Ahmed	Dr Stanley B Knight
Dr Joe Belanger	Dr Bikkar S Lalli
Ms Erin Biddlecombe	Mr William B McNulty
Dr Lawrence Burr	Ms Shannon Sterling
Mr Darran Fernandez	Mr Michael Thom
Mr Séan Haffey	Mr Des Verma

#### REPRESENTATIVES OF AFFILIATED COLLEGES

St Mark's College	Dr Paul C. Burns
Vancouver School of Theology	Rev. Dr Richard Topping
Regent College	Dr Rod Wilson
Carey Theological College	Rev. Dr Colin Godwin

#### LIBRARIAN

Dr Ingrid Parent, University Librarian

#### ELECTED BY THE PROFESSIONAL LIBRARIANS

Ms Trish Rosseel

#### DIRECTOR OF CONTINUING EDUCATION

Dr Judith Plessis

#### **ELECTED BY THE STUDENTS**

(Term from April 1, 2014 to March 31, 2015. One representative elected by each faculty, one representative from the College for Interdisciplinary Studies, and five members at-large)

Interdisciplinary Studies, and five members at-large)		
Applied Science	Mr Graham Beales	
Arts	Mr Daniel Munro	
Commerce and Business Administration	Mr Cole Leonoff	
Dentistry	T.B.D.	
Education	Ms Elaine Kuo	
Forestry	Ms Nani Mohd Yahya	
Graduate and	Ms Julienne Jagdeo	
Postdoctoral Studies	Mr Justin Wiebe	
Land and Food Systems	Ms Collyn Chan	
Law	Ms Brenda Bailey Gershkovitch	
Medicine	Mr Casey Chan	
Pharmaceutical Sciences	Ms Aliya Daulat	
Science	Mr Aaron Bailey	
College for Interdisciplinary Studies	Vacancy	
	Ms Nina Karimi, Arts	
Members at-large	Ms Anne Kessler, Arts	
	Ms Mona Maleki, Science	
	Mr Christopher Roach, Graduate	
	and Postdoctoral Studies	
	Mr Eric Zhao, Medicine	



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4 April 2014

To: Senate

From: Tributes Committee

Re: Memorial Minute – Dr. Sheldon Cherry

The Tributes Committee has prepared a memorial minute for the following individual

Dr. Sheldon Cherry

Motion: That Senate approve the Memorial Minutes for Dr. Sheldon Cherry and Ms. Suzanne Cates Dodson, that they be entered into the Minutes of

Senate, and that copies be sent to the family of the deceased.

Respectfully submitted,

Dr. Sally Thorne, Chair Senate Tributes Committee



#### **Dr. Sheldon Cherry**

Dr. Sheldon Cherry was born in Winnipeg and received his Bachelor of Science (Civil Engineering) from the University of Manitoba in 1949. After a Master of Science from the University of Illinois (1952) and a Doctor of Philosophy from the University of Bristol (1955), he spent one year at the University of Manitoba before joining UBC's Department of Civil Engineering as an Assistant Professor in 1956, becoming professor in 1969. He remained with the department until his retirement from teaching in 1993 and continued on at the University in an administrative capacity until 2010.

Following retirement from teaching, Dr. Cherry continued on at UBC as an Associate Dean at the Faculty of Graduate Studies (1987; 1990-1993) and was a member of the Senate during this time. He was acting Principal of St. John's College from 2003 until 2004 and also served as a College Faculty Fellow, sitting on the Membership Committee for many years. In honour of Dr. Cherry's fifty years of service to the University, the Sheldon Cherry Scholarship in Civil Engineering was established in 2005. Dr. Cherry's great accomplishment was in the development of earthquake engineering in Canada. He established earthquake engineering at UBC and was the driving force behind the first Canadian shake table for seismic testing. He was also a leader in developing codes that govern the seismic design of structures in Canada. Dr. Cherry was the Founding Chairman of the Canadian National Committee on Earthquake Engineering, a former committee of the National Research Council (1964-1975) which formulated the seismic provisions of the National Building Code of Canada.

Dr. Cherry chaired several Canadian Conferences on Earthquake Engineering and was instrumental in organizing the first such meeting at UBC in 1965. He was also the national representative on several international earthquake organizations and served as Director and President of the International Association for Earthquake Engineering. He was awarded honorary membership in the Earthquake Engineering Research Institute in 2002and named a Fellow of Engineers Canada in 2013. In 2013, he was awarded the Queen Elizabeth II Diamond Jubilee medal for his contributions to education and earthquake engineering in Canada

Outside of UBC, Dr. Cherry served as Chairman of the Vancouver Art Gallery and long-time member and supporter of Vancouver's Friends of Chamber Music.

The Senate sends its condolences to Dr. Cherry's family and friends.



#### Ms. Suzanne Cates Dodson

Ms. Dodson was a longtime employee and dedicated supporter of the UBC library.

After completing studies at the UBC School of Library, Archival and Information Studies, Ms. Dodson joined the UBC Library, where she worked for 36 years before retiring in 1999. Ms. Dodson was an enthusiastic advocate and supporter of the Library. Her generous contributions allowed for the installation at Koerner Library of an elevator to accommodate persons with disabilities and an air conditioning system to better preserve fragile and rare materials in the Rare Books and Special Collections vault. Ms. Dodson's generous support also funded a project to convert British Columbia government sessional papers to microfilm.

In 2006, Ms. Dodson, with her husband Earl Dodson, established the Suzanne Dodson Professional Development Award Endowment Fund to fund professional development opportunities for UBC Library employees. In recognition and appreciation of Ms. Dodson's support, the Library dedicated the Suzanne Cates Dodson and Earl D. Dodson Reading Room in the Main Library, now within the Chapman Learning Commons in the Irving K. Barber Learning Centre.

Ms. Dodson also leaves a lasting legacy at the School of Library, Archival and Information Studies. The Dodson Visiting Professorship is funded by a generous donation from Ms. Dodson and her husband and is named in their honour.

Ms. Dodson was a member of the Senate as representatives of the Professional Librarians from 1981 until 1984.

As a lifelong friend and supporter of the Library, Ms. Dodson will be greatly missed.

The Senate sends its condolences to Ms. Dodson's family and friends.

#### VANCOUVER SENATE

#### **MINUTES OF 19 FEBRUARY 2014**

#### **DRAFT**

#### Attendance

Present: Mr P. Edgcumbe (Vice-Chair), Dr K. Ross (Secretary), Mr T. Ahmed, Dr R. Anstee, Dean G. Averill, Dr K. Baimbridge, Mr G. Beales, Ms E. Biddlecombe, Dr H. Brock, Dr. P. Burns, Dr L. Burr, Mr C. Chan, Dr G. Chapman, Dr P. Choi, Dr W. Dunford, Dr D. Farrar (Provost and Vice-President, Academic), Mr D. Fernandez, Rev. Dr C. Godwin, Dr S. Grayston, Mr S. Haffey, Dr P. Harrison, Ms J. Jagdeo, Ms N. Karimi, Ms A. Kessler, Dr U. Kumar, Ms. E. Kuo, Dr B.S. Lalli, Mr J. Lee, Mr C. Leonoff, Dr P. Loewen, Ms K. Mahal, Dr F. Marra, Ms N. Marshall, Dr P. Marshall, Dr W McKee, Mr W. McNulty, Ms N. Mohd-Yahya, Principal L. Nasmith, Dr I. Parent, Dean M. Parlange, Ms M. Patton, Dean S. Peacock, Dr N. Perry, Dr J. Plessis, Mr M. Prescott, Dr A. Riseman, Ms T. Rosseel, Dr L. Rucker, Dean C. Shuler, Dr S. Singh, Dr R. Sparks, Ms S. Sterling, Dr S. Thorne, Dr M. Vessey, Dr R. Windsor-Liscombe.

Regrets: Dr J. Belanger, Dean M.A. Bobinski, Dr J. Brander, Mr B. Caracheo, Dean M. Coughtrie, Prof. B. Craig, Dean B. Frank, Prof. B. Goold, Dr W. Hall, Dean R. Helsley, Dean J. Innes, Dean M. Isman, Dr I. Ivanov, Dr S. Knight, Dr P. Leung, Prof. B. MacDougall, Mr T. MacLachlan, Ms M. Maleki, Ms S. Morgan-Silvester, Dr D. O'Donoghue, Dr K. Patterson, Dean S. Porter, Dr R. Reid, Ms T. Shum, Dr D. Simunic, Dean G. Stuart, Mr M. Thom, Prof. S.J. Toope, Rev. Dr R. Topping, Mr D. Verma, Dr L. Walker, Dr R. Wilson, Dr D. Witt.

**Guests:** Dr L. Best, Mr I. Burgess, Dr C. Fabian, Dr S. Jarvis-Selinger, Dr A. Kindler, Mr P. Ouillet, Dr A. Redish, Dr D. Snadden, Mr E. Zhao.

**Recording Secretary**: Mr C. Eaton.

#### Call to Order

The Vice-Chair of Senate, Mr Philip Edgcumbe, called the sixth regular meeting of the Vancouver Senate for the 2013/2014 academic year to order at 6:00 pm.

#### **Minutes of the Previous Meeting**

William McNulty } That the Minutes of the Meeting of 22 January Robert Sparks 2014 be adopted as presented.

Approved.

#### **Tributes Committee**

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

#### MEMORIAL MINUTE FOR DR PETER A. LUZTIG

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Peter Lusztig was born in Budapest and came to Canada in 1948 after spending much of his childhood in China and Hong Kong. In 1954, he graduated with a Bachelor of Commerce from UBC with a specialization in public administration. Outside of class, he was an active student as a member of the Thunderbird Swim Team and a member of the Alma Mater Society. After completing a Master of Business Administration at Western University in 1955, he began his finance career at the BC Electric Company (BC Hydro). While at BC Electric, Dr. Lusztig was recruited to join the Finance Division at UBC's Faculty of Commerce and Business Administration in 1957. After several years of teaching, he joined the doctoral program in finance at Stanford University, completing his doctoral studies in 1965. Dr. Lusztig was appointed Chair of the Finance Division in 1968 and was named Dean of the Faculty in 1977, a position he held until returning to the Finance Division in 1991. He remained a member of the Faculty until his retirement in 1995.

As Chair of the Finance group and as Dean, Dr. Lusztig led the Faculty to become one of the top business schools in the country. He established the first Advisory Council of a business school in Canada, established an internationally recognized Ph.D. Program, and assisted Shanghai Jiao Tong University in launching business courses alongside their engineering courses. Perhaps most importantly, under his leadership, UBC joined the ranks of the top research business schools in the world He was a member of the Senate as both a faculty member and as Dean, serving a total of 21 years as a Senator. Following retirement, Dr. Lusztig's involvement with the University continued through his continued affiliation with the Faculty and its Finance Division. In addition to his years of teaching at UBC, Dr. Lusztig also taught at the University of Washington and the Banff School of Advanced Management.

Early in his career, he accepted an appointment to the BC Royal Commission on Automobile Insurance, eventually becoming a founding director of the Insurance Corporation of British Columbia. Subsequently, he accepted appointments to a number of boards: CANFOR, ICBC, Royal Sun Alliance, Vancouver General Hospital and its Foundation, Tree Island Industries, ROINS Financial Holdings, Healthcare Benefit Trust, Arts Umbrella and the Vancouver Board of Trade. He served as sole commissioner of the BC Commission of Inquiry into the Tree Fruit Industry and chaired the Federal/Provincial Asia Pacific Initiative. Shortly before retiring, the federal government appointed Dr. Lusztig as Federal Commissioner to the BC Treaty Commission for 4 consecutive 2-year terms.

After 37 years with the University, Dr. Lusztig's retired in 1995 and was named Dean Emeritus of Commerce and Business Administration. In 2010, the University established the Peter Lusztig Professorship in Finance in recognition of his invaluable contribution to the University.

The Senate sends its condolences to Dr. Lusztig's family and friends.

Sally Thorne Winsor-Liscombe That Senate approve the Memorial Minute for Dr Peter A. Lusztig, that it be entered into the Minutes of Senate, and that a copy be sent to the family of the deceased.

Approved.

#### **Admissions Committees**

Senator Robert Sparks, Chair of the Admissions Committee, presented.

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#### **ENROLMENT TARGETS 2014-2015**

See Appendix A: Enrolment Targets

Robert Sparks } That Senate approve the 2014/2015 enrolment
Peter Choi targets, as per section 27(2)(r) of the University Act.

Dr Sparks explained that we plan many years in advance for Enrolment targets through a consultative process between the deans, provost and others. A key factor is the Provincial grant and the funded FTE, but strategic priorities, capacity, and funding opportunities are also considered.

The Committee Chair noted that there was a marginal increase in the Provincial grant due to new health funding, but we were still overenrolled compared to our funding. He further advised that this report was the first that reflected the phasing-in of enrolment for Vantage College.

Senator Sterling asked why Forestry was limiting its transfer enrolment except for one program.

Senator Marshall advised that this was just a prediction based on demand and success. Most of our transfer students are put into first year as they need to complete lower-division course requirements and pre-requisites.

Approved.

## BACHELOR OF DENTAL SCIENCE, DENTAL HYGIENE – CHANGES IN ADMISSION REQUIREMENTS

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Robert Sparks Lance Rucker That Senate approve changes to admission requirements for applicants to the Bachelor of Dental Science (Dental Hygiene) program, effective for admission to the 2015 Winter Session and thereafter.

Dr Sparks noted that Referenced letters were removed as they did not supply useful information for the admissions process.

Approved.

#### DOCTOR OF MEDICINE - CALENDAR CHANGES ON ADMISSION

Robert Sparks That Senate approve Calendar changes for the } Darrin Fernandez Doctor of Medicine program, effective for the 2015 Winter Session and thereafter.

Dr Sparks noted that the changes were to reflect changes to the MCAT, reduce in the number of applicants granted interviews, and clarify transfer language.

#### FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES - TRANSFER CREDIT

#### FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES - UNDERGRADUATE ELIGIBILITY FOR GRADUATE COURSES

Robert Sparks That Senate approve the revised Calendar entry on } Lance Rucker Transfer Credit for Master's degree students in the Faculty of Graduate and Postdoctoral Studies, effective for the 2014 Winter Session and thereafter; and That Senate approve the proposed Calendar entry on Undergraduate Eligibility for Graduate Courses,

Dr Sparks explained that these changes were to clarify the language around FOGS policy for transfer credit graduate course enrolment.

#### **Admissions & Curriculum Committees**

Senator Marshall presented on behalf of the Admission & Curriculum Committees

#### NEW DEGREE PROGRAM: BACHELOR OF MEDIA STUDIES

See Appendix B: Bachelor of Media Studies

Peter Marshall That the n ew Bachelor of Media Studies } Rhodri Winsor-Liscombe Program and its associated new courses and

subject code brought forward by the Faculty

effective for the 2014 Winter Session and thereafter

of Arts be approved.

With leave of Senate, Dr Janet Giltrow, Associate Dean of Arts explained that the Bachelor of Media Studies (B.M.S.) program was designed to attract the interest of high achieving students. The BMS takes existing resources and courses that UBC does very well and repackages them into a new degree program that more resembles a professional degree rather than a traditional Arts degree. There is a 61-credit core and a cohort model. The strictness of the core curriculum is compensated in part by moving away from certain basic BA requirements. She further noted that there were many media studies programs in the world and thus a lot of competition, but the Faculty of Arts believed that UBC had an opportunity to offer a good program and distinguish ourselves in this field.

Senator Ahmed asked if Government approval would be needed.

Senator Marshall replied that yes, as this would be a new degree, consent of the Minister for Advanced Education would sought as required by the *University Act*.

Senator Sterling noted that we were projecting a September start. She asked how we intended to recruit students

Dr Giltrow replied that we would have a "soft launch" and reach out to qualified students.

Approved.

#### **Curriculum Committee**

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

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#### FEBRUARY CURRICULUM PROPOSALS

See Appendix C: Curriculum Report

Peter Marshall Ken Baimbridge That the new courses, revised course, new minor, and revised programs brought forward by the faculties of Applied Science, Arts, Graduate and Postdoctoral Studies (Arts, Medicine, Pharmaceutical Sciences), and Law be approved.

Dr Marshall quickly explained the proposals from the Faculties. He highlighted that the Faculty of Arts was proposing a new Minor in Asian Canadian and Asian Migration Studies.

Senator Vessey questioned the title of RELG 307 (Sex, Lies, and Violence in the Hebrew Bible) and noted that more and more we seemed to have course titles that could be described as "pitches".

Dr Marshall advised that the Senate Curriculum Committee had had similar questions, and earlier this academic year had referred this matter back to the Faculty for review; the Faculty provided a rationale for the title.

Senator Singh advised that similar titles were used now at other recognized universities, but that the Senate Curriculum Committee had only approved this title for UBC with some hesitation.

**Approved** 

#### MD UNDERGRADUATE RENEWED CURRICULUM FRAMEWORK

See Appendix D: MD Program Renewal

Peter Marshall Ken Baimbridge That Senate approve the MD Undergraduate
Renewed Curriculum Framework Proposal in
principle, with the proviso that all new and changed
courses specified and any needed program changes
be forthcoming to Senate for approval prior to
implementation."

With leave of Senate, Dr David Snadden, Executive Associate Dean for Education, Faculty of Medicine, spoke to the proposal.

Senator Chan spoke in favour of the proposal on behalf of MD students. He noted that students in the program were still inquisitive about how the proposal will be implemented but viewed the framework positively.

In response to a question from Dean Peacock, Dean Shuler noted that Dentistry supported the framework proposal from Medicine.

Approved

#### **Academic Policy Committee**

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

#### ROLLING GRADUATION FOR DOCTOR OF MEDICINE (MD) GRADUANDS

Paul Harrison Philip Loewen } That Senate approve the rolling graduation proposal put forward by the Faculty of Medicine as set out in the attached document.

Senator Harrison explained that this proposal would allow undergraduate MD degrees to be granted outside of the usual November and May meetings, as was already the policy for graduate degrees generally.

**Approved** 

#### **Student Awards Committee**

The Chair of the Senate Awards Committee, Dr Sue Grayston, presented.

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See Appendix D: Awards Report

Sue Grayston Lawrence Burr That Senate approve the new awards and changes to existing awards as listed below and forward these to the Board of Governors for approval; and that letters of thanks be sent to the donors of new awards.

Senator Grayston noted that In addition to the roughly \$60 000 in new donor-funded awards, new University-funded awards were presented to enhance the diversity goals of UBC Vantage College. The College aimed to represent students from a diverse background and these awards would help them achieve a more diverse student body. The structure of the vantage awards would be in line with other International awards for UBC.

Senator Anstee noted the scale of the first award, as it was a large commitment on behalf of the University.

By general consent, the motion was divided to consider the Vantage College Excellence Award separately

#### VANTAGE COLLEGE EXCELLENCE AWARD

#### **AMENDMENT**

Richard Anstee Graham Beales That the Vantage College Excellence Awards terms be amended to strike "\$45,000" and replace it with "the cost of tuition and living expenses".

#### AMENDMENT TO THE AMENDMENT IN THE FORM OF A SUBSTITUTION

Paul Harrison Shannon Sterling That the Vantage College Excellence Awards terms be amended to strike "\$45,000" and replace it with "\$45,000 to cover the cost of tuition and living expenses".

Senator Marshall asked if it was prudent to approve the award if we were unsure of the wording.

Senator Fernandez asked what support would be available to students who had financial need.

Senator Grayston replied that from years 2-4 Vantage students would fall under the normal international awards.

Senator Harrison noted that the original award will be funded by Vantage, but noted that the years 2-4 awards were paid for out of the usual funds mandated by Board policy.

Senator N Marshall asked if we should include the renewal conditions in the award terms.

Senator Grayston replied that rules around renewal conditions were in the general University awards regulations.

Amendment to the amendment in the Form of a Substitution Approved

> Amendment Approved

Senator Karimi asked why the \$40 000 maximum for the renewal amount was set when this was above the normal awards term.

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#### AMENDMENT

Nina Karimi Natalie Marshall That the Vantage College Excellence Awards terms be amended to strike "\$40,000" and replace it with "\$34,000".

With leave of Senate, Principal James Ridge advised that the \$34,000 amount for other awards was an out-dated number that had not been adjusted for inflation. He informed Senate that \$40,000 was the appropriate amount for his program.

The Registrar concurred.

Senator Dunford asked why Vantage was not paying for years 2-4 of the award, noting that the expense would have to be covered by the faculties.

Principal Ridge replied that this would be in line with International Student Initiative awards, and that the faculties would see a benefit from international student tuition.

**Amendment Fails** 

By general consent, the matter of the value of the Vantage College Excellence Award was referred to the Senate Student Awards Committee

#### **QUESTION - VANTAGE COLLEGE EXCELLENCE AWARD**

Sue Grayston Lawrence Burr *That Senate approve the Vantage College Excellence Award as amended and forward it to the Board of Governors for approval.* 

Main Motion Approved

#### **OUESTION – REMANING AWARDS REPORT ITEMS**

Sue Grayston Lawrence Burr That Senate approve the new awards and changes to existing awards as listed below and forward these to the Board of Governors for approval; and that letters of thanks be sent to the donors of new awards.

**Approved** 

#### **Report from the Provost**

#### **BUDGET UPDATE**

The Provost, Dr Farrar, presented.

Dr Farrar set out the strategic context for the UBC budget. Provincial cuts and policies, sector transformations, and University ambitions are all leading to a need for cost cutting, revenue diversification and strategic investments.

Dr Farrar explained the basis of the University's budget. He noted that our only increasing sources of revenue are inflation-adjustments to tuition. Our expenses are largely growing due to increases in salaries. Our revenues are expected to be up by \$21M next year and almost all of this would go towards faculty and staff compensation for faculties. For our faculty budgets, deficits totalled \$27M this year and faculty reserves are now down from \$172M to \$145M versus last year.

The Provost noted that there are three types of faculty budget evolutions: international growth and undergraduate transformations. Professional program growth, and challenging funding models. Our larges two worries are Law and Medicine, as neither can grow professional programs or international numbers. Law's budget is only \$11M but it has a \$1M deficit. Medicine is very large but has a very complex budget.

For the entire University, the Provost opined that our key funding gaps were for infrastructure and student services.

Senator Vessey noted that the Community Engagement aspects of Place and Promise were not recognized in our budget.

The Provost agreed that it was time for a refresh and with a new president we would have that opportunity. We have struggled most with Community Engagement. We are still working on a strategy. We believe we need to give back to our community by creating a knowledge-based economy.

#### Report from the Registrar

#### **2014/2015 ACADEMIC YEAR**

The Registrar, Dr Kate Ross, noted for Senate that key dates for the 2014/15 Winter Session are as follows:

Term 1

Tuesday 2 September 2014 Term 1 begins

Friday 28 November 2014 Last day of Term 1 classes for most faculties

Tuesday 2 December 2014 First day of exams for Term 1 Wednesday 17 December 2014 Last day of exams for Term 1

Term 2

Monday 5 January 2015 Term 2 begins 16-20 February 2015 Midterm Break\*

Friday 10 April 2015 Last day of Term 2 classes for most faculties

Tuesday 14 April 2015 First day of exams for Term 2 Wednesday 29 April 2015 Last day of exams for Term 2

#### **IN CAMERA – Report from the Tributes Committee**

#### HONORARY DEGREE CANDIDATE

<sup>\*</sup> Please note that a request has been made for the Senate Academic Policy Committee to consider moving the standard week for the Midterm Break ahead by one week so that its start corresponds with the BC Family Day Statutory Holiday. Should the Senate approve that request, the Midterm Break will be from 10 to 13 February 2015, with 9 February being a holiday. This decision was recently made by the Okanagan campus for their Academic Year.

### Adjournment

There being no further business, the meeting was adjourned at 8:55 pm.

### **External Group**

January 20	Janet Wright, President, Janet Wright and Associates Inc.
January 20	Rob King, President, Westbridge Capital Group
January 20	Terry Hui, President and CEO, Concord Pacific Developments Inc., and Henry Yu, Principal, St. John's College
January 20	Philip Graham, Former President and CEO, Graymont Inc. and Graymont Western Canada Inc.
January 20	Peter Wall, Founder, and Sonya Wall, Vice-President, Communications, Wall Financial Corporation
January 20	Jason Ko, President and CEO, Viva Pharmaceuticals, and Emily Ko
January 21	Morgan Sturdy, Chair, Great Northern Way Trust
January 21	Brent Cameron, Managing Partner, Boyden Global Executive Search
January 21	Great Northern Way Trust Shareholders Meeting
January 22	François Tanguay-Renaud, Associate Dean, Research, Graduate Studies and Institutional Relations, and Director, Nathanson Centre on Transnational Human Rights, Crime and Security, Osgoode Hall Law School, York University
January 22	Graham Carr, Vice-President, Research and Graduate Studies, Concordia University
January 23	The Research Universities' Council of British Columbia (RUCBC) Presidents' Committee Meeting
January 23	Arvind Gupta, CEO and Scientific Director, Mathematics of Information Technology and Complex Systems (MITACS)
January 23	Bob Rennie, Founder and CEO, Rennie Marketing Systems
January 23	Rudy North, President and CEO, North Growth Management
January 23	Lindsay Gordon, Past President and CEO, HSBC Bank Canada, Co-Chair, start an evolution Campaign, and Member, UBC President's Strategic Advisory Council, and Elizabeth Gordon, Board Member, InnerChange Charitable Foundation

January 24	Paul Davidson, President, Association of Universities and Colleges of Canada (AUCC)
January 24	Mike Harcourt, Former Premier, Government of British Columbia
January 30	Chris Dolan, Director, The Centre for Refugee Law, Makerere University (Kampala, Uganda)
January 30	John Horning, Chair, and Harold Kalke, Trustee, David Spencer Endowment Encouragement Foundation
January 30	Raymond Lee, CEO, Lee and Man Paper Manufacturing Limited
January 30	Bob Rennie, Founder and CEO, Rennie Marketing Systems
February 3	Suzanne Fortier, Principal and Vice-Chancellor, McGill University
February 4	Peter Wall, Founder, Wall Financial Corporation
February 5	Robin Ciceri, President, The Research Universities' Council of British Columbia (RUCBC)
February 5	Arvind Gupta, CEO and Scientific Director, Mathematics of Information Technology and Complex Systems (MITACS)
February 5	Morgan Sturdy, Chair, Great Northern Way Campus Trust
February 5	Robert H. Lee, Founder and Chairman, Prospero International Realty Inc.
February 7	Suzanne Fortier, Principal and Vice-Chancellor, McGill University
February 7	Arvind Gupta, CEO and Scientific Director, Mathematics of Information Technology and Complex Systems (MITACS)
February 11	Michael B. Davies, Principal, Davies and Company, and Member, Toronto Leadership Circle
February 11	Paul Davidson, President, Association of Universities and Colleges of Canada (AUCC)
February 12	Michael Koerner, President, Canada Overseas Investments Limited
February 12	William Graham, P.C., Q.C., Chancellor, Trinity College, University of Toronto

February 12	Eddy Campbell, President, University of New Brunswick
February 12	David McLean, Chairman of the Board, Canadian National Railway Company, and CEO and Chairman of the Board, The McLean Group of Companies
February 14	Roy MacLaren, P.C., Board Chair, IC-IMPACTS, Chairman, Canada-Europe Roundtable for Business, Honourary Chairman, Canada-India Business Council, and Honourary Member, UBC Campaign: Toronto Leadership Circle
February 14	Bruno Wall, President, Wall Financial Corporation
February 14	Morris Rosenberg, Mentor, Pierre Elliott Trudeau Foundation, and Former Deputy Minister, Ministry of Foreign Affairs, Government of Canada
February 17	Dinesh Singh, Vice-Chancellor, University of Delhi
February 17	Transformative Learning – How It's Driving Universities to Change? Roundtable with Dinesh Singh, Vice-Chancellor, University of Delhi, and his Executive Team
February 17	Ved Prakash, Chair, University Grants Commission (UGC), University of Delhi
February 17	Presentation by Dr. Yves Tiberghien, Director, Institution of Asian Research UBC, and Roundtable on <i>China's Approach to Global Economic and Environmental Governance: The Cases of G20, Climate Policy and GMO Regulation in a Larger Perspective</i>
February 17	Kavita Sharma, Director, India International Center (IIC)
February 18	Frédéric Mion, President, and Francis Vérillaud, Director, International Affairs, Institute of Political Studies of Paris (Sciences Po)
February 18	Rajiv Kumar, Senior Fellow, The Centre for Policy Research (New Delhi, India)
February 18	Barun Mohanty, Managing Director, International, Michael and Susan Dell Foundation
February 19	Devang Khakhar, Director, India Institute of Technology (IIT), Bombay, and Aravind Chinchure, Vice-President, Reliance Innovation Leadership Centre (Mumbai, India)

February 19	The Research Universities' Council of British Columbia (RUCBC) Presidents' Meeting	
February 20	Vasudha Kamat, Vice-Chancellor, Shreemati Nathibai Damodar Thackersey Women's University (Mumbia, India)	
February 20	Frazer Mascarenhas S.J., Principal, Aruna Gulanikar, Vice-Principal, Junior College, and Radiya Pasca-Gupta, Director, International Programs, St. Xavier's College (Mumbai, India)	
February 28	Thomas A. Roper, Q.C., Partner, Roper Greyell LLP	
February 28	Bruno Wall, President, Wall Financial Corporation	
March 4	Jeremy Newsum, Executive Trustee, Mark Preston, Group CEO, Grosvenor Group, Graham Ramsbottom, CEO, Wheatsheaf Investments, and Andrew Bibby, CEO, Grosvenor Americas, Grosvenor Estate	
March 4	The Research Universities' Council of British Columbia (RUCBC) Presidents' Meeting	
March 4	David Cheriton, Professor, Computer Science and Electrical Engineering, Stanford University	
March 5	Ted Lipman, CEO, The Robert H.N. Ho Foundation	
March 5	Meric Gertler, President, University of Toronto	
March 5	Janis Gray, Inspector, RCMP Lower Mainland District Office, Province of British Columbia	
March 5	Pekka Sinervo, Senior Vice-President, Research, Canadian Institute for Advanced Research (CIFAR)	
March 5	Cheryl Slusarchuk, Partner, Blake, Cassels and Graydon LLP	
March 5	Ross Beaty, Chairman, PanAmerican Silver Corporation	
March 5	Brent Cameron, Managing Partner, Boyden Global Executive Search	
March 6	George Hungerford, Hungerford Group International Holdings Corporation	
March 7	Paul Davidson, President, Association of Universities and Colleges of Canada (AUCC)	

March 7	Christine Tausig-Ford, Vice-President and COO, Association of Universities and Colleges of Canada (AUCC)	
March 7	Suzanne Corbeil, Executive Director, U15 – Group of Canadian Research Universities	
March 7	Alan Bernstein, President and CEO, Canadian Institute for Advanced Research (CIFAR)	
March 9	Indira Samarasekera, President and Vice-President, University of Alberta	
March 10	Special Meeting of the Directors and Members of The Pierre Elliott Trudeau Foundation Teleconference	
March 10	Robin Ciceri, President, The Research Universities' Council of British Columbia (RUCBC)	
March 10	Kathy Kinloch, President, British Columbia Institute of Technology (BCIT)	
March 10	Stewart Blusson, CEO and President, Archon Minerals Limited	
March 11	Charles (Chuck) Jeannes, President and CEO, Goldcorp Inc., and Trish Walsh, Executive Director, InnerChange Foundation	
March 11	Association of Universities and Colleges of Canada (AUCC) Nominating Committee	
March 11	Dominic Barton, Global Managing Director, McKinsey and Company	
March 11	Morgan Sturdy, Chair, Great Northern Way Trust	
March 11	Geoff Plant, Associate Counsel, Gall, Legge, Grant and Munroe LLP	
March 13	Ken McCarter, Partner, Torys LLP	
March 13	Michael Davies, Principal, Davies and Company	
March 13	Wendy Dobson, Co-Director, Institute for International Business, Joseph L. Rotman School of Management, University of Toronto	
March 13	Mathematics of Information Technology and Complex Systems (MITACS) Board Dinner	
March 14	Mathematics of Information Technology and Complex Systems (MITACS) Board of Directors Meeting	

### Government

January 21	Sandra Carroll, Deputy Minister, Ministry of Advanced Education, Province of British Columbia	
January 27	Terry Lake, Minister, Sabrina Loiacono, Chief of Staff, Ministry of Health, Doug Hughes, Assistant Deputy Minister, Health Services Policy and Quality Assurance Division, Arlene Paton, Assistant Deputy Minister, Population and Public Health, Warren O'Briain, Executive Director, Communicable Disease Prevention, Harm Reduction and Mental Health Promotion, and Geoff Plant, Associate Counsel, Gall, Legge, Grant and Munroe LLP	
February 11	James (Jim) Flaherty, Minister, Ministry of Finance, Government of Canada	
February 11	Private Pre-Budget Reception with Cabinet Ministers and Caucus with Stephen Harper, Prime Minister, Government of Canada	
February 11	Budget Tabling and Post-Budget Reception with Stephen Harper, Prime Minister, Government of Canada	
February 13	Great Northern Way Shareholders Meeting with Sandra Carroll, Deputy Minister, Ministry of Advanced Education, Province of British Columbia	
February 17	Stewart Beck, High Commissioner of Canada to India, Government of Canada	
February 17	Ivy Lerner-Frank, First Secretary and Trade Commissioner, Education and Science and Technology, The High Commission of Canada to India, New Delhi, Government of Canada	
February 20	Richard Bale, Consul General of Canada to Mumbai, Government of Canada	
February 20	Roundtable Discussion with Canadian Consulate General and the Indo- Canadian Business Chamber (ICBC) (Mumbai, India)	
February 24 – 25	Member of the Official Delegation in New Delhi, India, of the State Visit to the Republic of India by their Excellencies, The Right Honourable David Johnston, Governor General of Canada, and Mrs. Sharon Johnston, Government of Canada	
February 28	Gregor Robertson, Mayor, Mike Magee, Chief of Staff to the Mayor, Penny Ballem, City Manager, City of Vancouver, Province of British Columbia, and Andrew Petter, President and Vice-Chancellor, Simon Fraser University (SFU)	

March 3	Sandra Carroll, Deputy Minister, Ministry of Advanced Education, Province of British Columbia
March 5	Janis Gray, Assistant Operations Officer, Royal Canadian Mounted Policy (RCMP) Lower Mainland District, Government of Canada
March 7	Wayne Wouters, Clerk of the Privy Council, and Secretary to the Cabinet, Government of Canada
March 7	Michael Horgan, Deputy Minister, and Richard Botham, Assistant Deputy Minister, Economic Development and Corporate Finance, Finance Canada, Government of Canada
March 7	Rob Dunlop, Assistant Deputy Minister, Science and Innovation, Industry Canada, Government of Canada
March 10	Timothy Sargent, Associate Deputy Minister, Agriculture and Agri-Food Canada, Government of Canada

## **Travel**

January 29	Kelowna, BC – External Community Advisory Council and UBC Okanagan Senate Meetings
February 6 – 9	Montreal, QC – The Unbounded Level of the Mind: Rod Macdonald's Legal Imagination Symposium
February 11	Toronto, ON – Development Meeting
February 11	Ottawa, ON – Government Relations Meetings
February 12 – 15	Toronto, ON – Development Meetings
February 15 – 19	New Delhi, India – International Meetings
February 19 – 21	Mumbai, India – International Meetings

February 23 – 26	New Delhi, India – State Visit to the Republic of India by their Excellencies, The Right Honourable David Johnston, Governor General of Canada, and Mrs. Sharon Johnston, Government of Canada
March 12 – 16	Toronto, ON – Development Meetings and MITACS Board of Directors Meeting

## **Speeches / Events**

January 23	Official Opening of Physical Geography Laboratories in the Ponderosa Commons-West	
January 24	6 <sup>th</sup> Annual Lunar New Year Luncheon	
January 30	Videotaping Session for the 2014 TELUS Millennium Scholarship Breakfast and Community Engagement and UBC: the President's Perspective	
February 3	UBC Board Dinner to Honour Former and Retiring Board Members	
February 5	Retirement Celebration for Richard Vedan, Former Director, First Nations House of Learning	
February 8	Panelist for the "Pursuing Virtue at The Unbounded Level of the Mind" session at The Unbounded Level of the Mind: Rod Macdonald's Legal Imagination Symposium	
February 17	UBC Alumni Networking Reception Hosted by Kavita Sharma, Director, India International Center (New Delhi, India)	
February 27	Official Opening of the Djavad Mowafaghian Centre for Brain Health	
February 27	start an evolution Campaign Cabinet Meeting and Dinner	
February 28	Gala to Celebrate the Opening of the Djavad Mowafaghian Centre for Brain Health	
March 2	The Royal Conservatory's 2013 Vancouver Convocation and Gold Medals Ceremony (Prof. Toope was awarded an Honourary Fellowship)	
March 4	Green College Lunch to Celebrate Prof. Sherill Grace's Appointment as an Officer of the Order of Canada	

March 4	UBC Farm Family Dinner
March 11	2014 Faculty Research Awards Reception
March 11	Scotiabank and United Way Community Spirit Awards (Prof. Toope awarded the President's Award of Distinction.)
March 12	Formal Announcement Naming the 13 <sup>th</sup> President and Vice-Chancellor of UBC – Vancouver Campus

## **Student Events/Meetings**

January 22	Student Senator Caucus Lunch (Vancouver campus)
January 24	Breakfast with the President – Students
January 25	Kathleen Duborg's Production of <i>The Seagull</i>
January 30	AMS All Presidents Dinner – Vancouver Campus

### **Media Interviews**

January 29	Alexandra Barberis, Reporter, The Phoenix News – Okanagan Campus
February 11	James Bradshaw, Education Reporter, The Globe and Mail
February 28	Press Conference on the UBC Sports Review
February 28	Geoff Lister, Coordinating Editor, and Will McDonald, News Editor, The Ubyssey – Vancouver Campus
March 5	Rick Cluff, Host, The Early Edition, CBC Radio

UBC Vancouver Senate Topic of Broad Academic Interest and Ad-Hoc Committee Proposal:

#### Fostering a Healthy Academic Environment to Support Student Wellbeing and Academic Success April 8, 2014

Submitted by: Kiran Mahal, Mona Maleki, and Christopher Roach on behalf of the UBC Vancouver Student Senate Caucus

#### **Background**

Student health and wellbeing have become a key priority for students at UBC and is a key action under the pillar of student learning in *Place and Promise*, UBC's strategic plan:<sup>1</sup>

#### COMMITMENT: STUDENT LEARNING

**Goal:** "Enhance the quality and impact of teaching for all students"

**Action:** "Review and revise curricula and pedagogy to ensure that they are informed by leading edge research on how people learn"

**Goal:** "Support student well-being, personal development and outstanding campus life"

**Action**: "Increase support for student health and wellbeing, with a specific focus on mental health"

Student leaders have increasingly made addressing student mental health a core priority of their platforms and plans in elections, as evidenced in the recent AMS general election. A scan through articles from *The Ubyssey*<sup>2</sup> over the last few years reinforces and highlights the conversations taking place across campus. The establishment and continuous growth of the student Mental Health Network<sup>3</sup> and UBC and the UBC Mental Health Symposium<sup>4</sup> also reflect the broad, cross-campus nature of this issue.

Great strides are being taken to improve the resources and support provided to students, staff and faculty at UBC. Research has shown that an institution wide, integrated and holistic approach to addressing student mental health is essential to a thriving university environment.<sup>5, 6, 7</sup>

In the realm of student mental health and wellbeing particularly, many successful initiatives have been implemented by the VP Students Office including the Early Alert System<sup>8</sup>, and new Triage System in

<sup>&</sup>lt;sup>1</sup> http://strategicplan.ubc.ca/ (accessed February 17, 2014)

<sup>&</sup>lt;sup>2</sup> Young, S., *State of mind: the changing face of mental health at UBC*, The Ubyssey, December 4, 2013 <a href="http://ubyssey.ca/culture/mental-health-ubc484/">http://ubyssey.ca/culture/mental-health-ubc484/</a>

Rosenfeld, A. Student housing, mental health emphasized at VP Academic debate, The Ubyssey, January 21, 2014 <a href="http://ubyssey.ca/news/2014-vp-academic-debate-235/">http://ubyssey.ca/news/2014-vp-academic-debate-235/</a>

Navas, E.G., Nipped in the bud: How a UBC mental health program targets warning signs early, The Ubyssey, September 26, 2012 <a href="http://ubyssey.ca/features/early-alert525/">http://ubyssey.ca/features/early-alert525/</a>

<sup>&</sup>lt;sup>3</sup> <a href="http://www.ubcmhn.com/">http://www.ubcmhn.com/</a> - 22 member organizations from across campus including Undergraduate Societies and student support services

 $<sup>^4</sup>$  Increase in attendance from 40 delegates in 2012 to 80 in 2013 to 140 in 2014

<sup>&</sup>lt;sup>5</sup> Canadian Association of College and University Student Services, and Canadian Mental Health Association, (2012): "Post-Secondary student mental health: guide to a systemic approach"

<sup>&</sup>lt;sup>6</sup> Dooris, M., Cawood, J., Doherty, S., Powell, S., (2010): "Healthy universities: concept, model and framework for applying the healthy setting approach within higher education in England," *Healthy Universities*.

<sup>&</sup>lt;sup>7</sup> Tsouros, A.D., Dowding, G., Thompson, J., Dooris, M., (1998): "Health promoting universities: concept, experience and framework for action," *World Health Organization Regional Office for Europe*.

<sup>&</sup>lt;sup>8</sup> http://facultystaff.students.ubc.ca/early-alert

Counselling Services<sup>9</sup> and many awareness campaigns. However, the move to address systemic sources of student stress in the university environment requires academic leadership.

Efforts around wellbeing have been led by the Office of the VP Students and student service professionals leading to a recent university wide commitment towards developing a cross-campus Mental Health and Wellbeing Strategy that includes student, staff and faculty on both the Vancouver and Okanagan campuses.

An integrated approach to addressing student mental health on university campuses highlights the need for a partnership across all units in the university community, with leadership from the highest academic and non-academic governing bodies of the institution.

The UBC Board of Governors received a discussion paper on student mental and health and wellbeing in December 2012,<sup>10</sup> and lent support for the proactive steps being taken by the institution, the need to employ an integrated approach, and requested suggestions for how the Board might support mitigating student stress and anxiety. <sup>11</sup> The university's commitment to developing a Wellbeing Strategy presents a critical time and opportunity for Senate involvement.

#### **Mental Health and Academic Success**

Research shows a strong connection between student mental health and academic performance. 12,13,14,15 There is also evidence from student surveys showing a link between academic pressures and student mental health as outlined in the section below. Our students report that the UBC academic environment, not unlike many post-secondary institutions, is one of high pressure, competition, and rigid policies and regulations. This environment combined with the stage at which students are in their development, financial constraints and anxiety associated with career planning likely contribute to the observed trends health and wellbeing among students, which in turn impact student academic success.

#### **Student Mental Health at UBC**

Student mental health and wellness is a significant issue at UBC. In the 2013 National College Health Assessment Survey administered by UBC, results present a striking link between student mental health concerns and student academic performance. The data showed that 55% of undergraduate and 43% of graduate students cited academics as being an issue that they considered "traumatic or difficult to handle" in the last 12 months. 53% of undergraduate and 61% of graduate students and cited their overall level of stress in the last 12 months as "more than average" or "tremendous".

<sup>&</sup>lt;sup>9</sup> UBC Vancouver Mental Health and Wellbeing Discussion Paper, 2012, pg. 15 http://bog2.sites.olt.ubc.ca/files/2012/11/2.1\_2012.12\_Mental-Health-Attachments-1-2.pdf

<sup>&</sup>lt;sup>10</sup> Student Mental Health and Wellbeing, Board of Governors Agenda, December 4, 2012. http://bog2.sites.olt.ubc.ca/files/2012/11/2.1 2012.12 Mental-Health.pdf

http://bog2.sites.olt.ubc.ca/files/2012/11/2.1\_2012.12\_Mental-Health.p

<sup>&</sup>lt;sup>11</sup> Minutes of UBC Board of Governors Meeting, December 4, 2012. http://bog.ubc.ca/files/2013/02/MIN-BG-2012.12.04-Open.pdf

<sup>&</sup>lt;sup>12</sup> Trockel, M.T., Barnes, M.D., Egget, D.L., (2000): "Health related variables and academic performance among first-year college students: implications for sleep and other behaviors," *Journal of American College Health*, 49(3), 125-131.

<sup>&</sup>lt;sup>13</sup> Hysenbegasi, A., Hass, S.L., Rowland, C.R., (2005): "The impact of depression on the academic productivity of university students," *Journal of Mental Health Policy and Economics*, 8, 145-151.

<sup>&</sup>lt;sup>14</sup> Andrew, B., Wilding, J., (2005): "The relation of depression and anxiety to life-stress and achievement in students," *British Journal of Psychology*, 95(4), 509-521.

<sup>&</sup>lt;sup>15</sup> Eisenberg, D., Golberstein, E., Hunt, J.B., (2009): "Mental health and academic success in college," *The B.E. Journal of Economic Analysis & Policy*, 9(1), article 40.

The following results were gathered when students were asked to identify issues that affected their academic performance in the last 12 months: 16

Issue	UBC Undergraduate Students	UBC Graduate Students
Stress	37%	23%
Sleep difficulties	26%	11%
Anxiety	26%	15%
Internet Use	27%	8%
Depression	16%	12%
Extracurricular activities	16%	6%
Work	15%	15%
Finances	7%	9%
Cold or flu	23%	12%

The 2013 Alma Mater Society (AMS) Academic Experience Survey results indicated that the following factors cause students stress or anxiety on a regular basis:<sup>17</sup>

Factor	UBC Undergraduate and Graduate Students
Course workload	76%
Assessment expectations	67%
Degree requirements	52%
Course planning	43%
Competitive academic	58%
environment	

54% of students supported the statement "During my time at UBC, I have experienced a level of stress or anxiety considered by myself or others to be unhealthy" with 32% of respondents indicating that they had been in a situation where mental health or health issues jeopardized successful completion of their course or degree related work.<sup>18</sup>

The results of both these surveys show that academics are significant areas of concern for students and result in high levels of stress and anxiety for much of our student population. With over half of the undergraduate student population pointing towards academics as the most significant issue relating to their overall health, it is evident that there is more work to be done in this area. Other institutions have taken bold steps to develop creative and system solutions to address academic barriers to student success under the guidance of academic leadership.

#### The Role of Senate

The policies, procedures and academic environment of an institution have both direct and indirect impacts on student mental health and wellbeing, and therefore impacts our students' capacity to be academically successful. As more universities recognize their roles in promoting student health and wellbeing, the most commonly accepted approaches build off a foundation where health and wellbeing is a core facet to decision

18 Ibid

<sup>&</sup>lt;sup>16</sup> Impacts to academic performance defined as 'lower grade on exam or project', 'lower grade in course', 'incomplete or dropped course', or 'significant disruption to thesis, dissertation, research, practicum'

Note – numbers vary between year level and between Faculties

<sup>&</sup>lt;sup>17</sup> Mahal, Kiran, *Academic Experience Survey Report 2013*, Office of the VP Academic and University Affairs of the Alma Mater Society of UBC Vancouver, 2013.

making, policy development, and planning. This process involves institutions acknowledging and addressing the roles their policies and processes play in negatively impacting student wellbeing.

Given the vital link between academics and student wellbeing, the Senate has an invaluable role in leading the institution's systemic approach to addressing student mental health and wellbeing issues. The Senate is best positioned to take on this leadership role given the high level and wide reaching perspective which Senators possess and are responsible for. The Senate has the tools to be both pragmatic and aspirational in moving the university towards its vision of being the healthiest campus in the world. Additionally, the academic expertise within the Senate would allow a task force to gather wide ranges of qualitative and quantitative information to formulate and develop effective frameworks for action.

#### **An Ad-Hoc Committee**

The establishment of an ad-hoc committee is being proposed by the Student Senate Caucus to address the broad reaching nature of academic success and wellbeing, recognizing that this issue goes beyond the scope of one Senate Standing Committee alone. Research shows that the most profound and impactful solutions are ones that take into account the entire system of the institution in decision making. The learning environment, curriculum, policies, procedures, and learning support all play a role in a systemic approach.

An ad-hoc committee is time limited, and operates within a specific set of terms of reference to reach a defined outcome that is reported back the Senate to take action on. Ad-hoc committees are flexible and action-oriented which is the format best suited for this particular issue.

#### **Example of Task Forces with Senate and Academic Leadership**

- Principal's Commission on Mental Health, Queen's University, 2011
- Student Mental Health and Wellbeing Task Force, Stanford University, 2008
- President and Provost's Student Mental Health Committee, University of California, 2006
- Commission on Mental Health and Welfare, Cornell University, 2004
- Senate Task Force on Wellness, University of Alberta, 2003

## DRAFT Terms of Reference<sup>19</sup> UBC-V Senate Ad-Hoc Committee on Fostering a Healthful Academic Environment

That Senate appoint an ad-hoc committee on Student Mental Health and Wellbeing to examine and report back to the UBC Vancouver Senate on the current academic environment and its impact on student mental health, wellbeing, and learning; develop a framework for incorporating considerations of student wellbeing into academic decision making; and where appropriate provide recommendations to changes in Senate policies to better support students in fulfilling their full academic and personal potential.

#### **Objectives**

The objectives of the ad-hoc committee will be to:

- examine how the academic environment impacts student health and wellbeing
- articulate the role of Senate in providing leadership in building a healthful academic environment
- develop opportunities for members of the university to share suggestions, experiences and feedback for improving the academic environment at UBC to better support wellbeing and learning through identifying policies and procedures that support or detract from student health and wellbeing
- examine and evaluate current university academic policies and procedures to assess their impacts on student health and wellbeing
- identify areas within current policies and procedures that can be modified to better support student wellbeing and learning while fulfill their intended institutional purpose
- examine frameworks and models employed at other institutions to incorporate health and wellbeing into academic decision making and suggest a model appropriate for UBC

#### **Deliverables and Outcomes**

The ad-hoc committee will:

- examine existing data, information, and research on student mental health at UBC and engage with key expert stakeholder groups to gain insights into the current state of the academic environment in relation to student health and wellbeing
- deliver to Senate a final report that:
  - o Provides a summary of the feedback received from key stakeholders
  - Proposes a framework that can be utilized in academic decision making to incorporate understanding and recognition of impacts on student health and wellbeing
  - o Articulates the role of Senate in building a healthful academic environment
  - Provides recommendations to the Senate for changes to existing institutional structures and policies to better support student mental health and wellbeing and front line student services staff providing support to students
- share the results of its report widely with the university community

<sup>&</sup>lt;sup>19</sup> These terms of reference (TOR) are meant to provide an overview of the scope of work the ad-hoc committee may undertake for the purposes of the discussion of this Topic of Broad Academic Interest. Senate is not being asked to approve these TOR at this time. If an ad-hoc committee is struck, the development of the final TOR and composition will be referred to Senate Nominating Committee.



Office of the Senate Brock Hall | 2016 - 1874 East Mall Vancouver BC V6T 1Z1

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28 March 2014

To: Vancouver Senate

From: Senate Academic Policy Committee

Re: Amendments to Grading Practices for the Faculty of Dentistry

The Faculty of Dentistry has requested the changes set out in the attached two-column form to make the definition of Fail (F) in the Dental Hygiene Degree Program clear.

The Academic Policy Committee has reviewed the proposal and is in support of the changes therein. Therefore, the following is recommended to Senate:

**Motion:** "That the amendments to the Grading Practices section of the Academic

Calendar requested by the Faculty of Dentistry be approved, as set out in

the attached document."

Respectfully submitted,

Dr. Paul Harrison, Chair

Senate Academic Policy Committee



## UBC Curriculum Proposal Form Change to Course or Program

Category: (1 or 2)

Faculty: Dentistry
Department:

Faculty Approval Date: March 13, 2014

Effective Session \_2014W\_ Term \_1\_\_

Year\_2014\_ for Change

**Date: March 17, 2014** 

**Contact Person: Professor Bonnie Craig** 

Phone: 604-822-4680

Email: bjcraig@dentistry.ubc.ca

#### **URL:**

http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,42,96,0#217

#### **Present Calendar Entry:**

The Faculty of Dentistry and the schools of Library, Archival and Information Studies, Nursing, and Rehabilitation Sciences define Fail (F) as below 60%. The Faculty of Medicine defines Fail (F) as below 60% unless otherwise specified in the course Policy and Procedure Manual.

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

Change wording to Policies and Regulations> **Grading Practices**, with regards to courses taken outside the Faculty of Dentistry to match other faculty's grading practices.

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

The Faculty of Dentistry defines Fail (F) as below 60% except for students registered in the Dental Hygiene Degree Program, where a Fail (F) is defined as below 60% for courses offered by the Faculty of Dentistry, and in accordance with passing grades defined by non-Faculty of Dentistry courses in other university faculties.

1

#### **Proposed Calendar Entry:**

The Faculty of Dentistry defines Fail (F) as below 60% except for students registered in the Dental Hygiene Degree Program, where a Fail (F) is defined as below 60% for courses offered by the Faculty of Dentistry, and in accordance with passing grades defined by non-Faculty of Dentistry courses in other university faculties.

and tThe schools of Library, Archival and Information Studies, Nursing, and Rehabilitation Sciences define Fail (F) as below 60%. The Faculty of Medicine defines Fail (F) as below 60% unless otherwise specified in the course Policy and Procedure Manual.



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07 March 2014

To: Vancouver Senate

From: Senate Academic Policy Committee

Re: Clarification in Policy for Masters' Degree Requirements

The Faculty of Graduate and Postdoctoral Studies has requested that the language in the Academic Calendar be changed in order to clarify that 100- and 200- level courses are not eligible to be counted to program requirements for masters' degrees. In addition, the Faculty sought to make an explicit statement that a maximum of 20% of the requirements of a master's program can consist of upper-level undergraduate courses. This does not represent a change in policy, but a clarification of current practice.

The following is recommended to Senate:

**Motion:** "That the changes to the program requirements for master's degrees

brought forward by the Faculty of Graduate and Postdoctoral Studies be

approved as set out in the attachment."

Respectfully submitted,

Dr. Paul Harrison, Chair

Senate Academic Policy Committee



# **UBC Curriculum Proposal Form Change to Course or Program**

Category: (2)

Faculty: Graduate Studies Department: Dean's Office

**Faculty Approval Date: November 13** 

2013

Effective Session: Immediate – clarification of existing policy

Date: November 13 2013 Contact Person: Max Read

Phone: 2-0283

Email: max.read@ubc.ca

#### **Proposed Calendar Entry:**

## Program Requirements (Thesis and Non-Thesis Programs)

The minimum course requirements are 30 course credits, of which at least 24 must be numbered 500 to 699. A maximum of 6 credits at the undergraduate level in courses numbered 300 to 499 may be counted toward the requirements of a master's degree. A comprehensive examination in the form of a final written and/or oral examination is at the discretion of the graduate program.

In specific programs, minimum requirements may be higher than 30 course credits. Undergraduate courses numbered 300 to 499 may account for no more than 20% of the course credit requirement.

Courses numbered 100 to 299 and courses taken through Continuing Studies may not be counted towards the requirements of a master's degree program.

Students should consult the graduate program listing in the Calendar for more information.

#### **URL**:

http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,342,614

#### **Present Calendar Entry:**

## Program Requirements (Thesis and Non-Thesis Programs)

The minimum course requirements are 30 course credits, of which at least 24 must be numbered 500 to 699. A maximum of 6 credits at the undergraduate level in courses numbered 300 to 499 may be counted toward the requirements of a master's degree. A comprehensive examination in the form of a final written and/or oral examination is at the discretion of the graduate program.

In specific programs, minimum requirements may be higher than 30 course credits. Students should consult the graduate program listing in the Calendar for more information.

**Type of Action:** editorial changes to master's program requirements

#### Rationale:

Make explicit established policy that 100 and 200 courses are not counted to program requirements.

Make explicit statement that a maximum 20% of senior undergraduate courses can be counted towards a master's program.

NOTE: these are not policy changes. The original Calendar entry states that only



undergraduate courses numbered 300 to 499 can be counted towards a graduate degree. The additional wording confirms that undergraduate courses numbered 100 to 299 and non-degree courses taken through Continuing Studies are not eligible to be counted. We hope this clarifies the original wording by stating what level of courses are not eligible as well as what courses are eligible.

6 credits is 20% of a 30-credit master's. When the policy was originally drafted, master's degrees that require more than the minimum 30 credits were not specifically addressed. Stating "20%" instead of "6 credits" clarifies this policy for all master's degrees regardless of number of credits required.



Office of the Senate Brock Hall | 2016 - 1874 East Mall Vancouver BC V6T 1Z1

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28 March 2014

To: Vancouver Senate

From: Senate Academic Policy Committee

Re: Graduate Council Restructuring

The Faculty of Graduate and Postdoctoral Studies has submitted a proposal to restructure and reduce the size of the Graduate Council (attached). After an external review of the Faculty was conducted in 2011, a major recommendation was that the structure of the Graduate Council should be revised and that a smaller composition would be advisable. The Provost subsequently struck a broad-based ad hoc committee to consider this and other recommendations arising from the external review. After extensive consultation, the ad hoc committee endorsed a model that is now reflected in the attached proposal—a Graduate Council that is small enough to enable meaningful dialogue, deliberation, and engagement but large enough to be representative of the diversity of disciplines and program types.

The Academic Policy Committee has reviewed the proposal and is in support of the changes therein. Therefore, the following is recommended to Senate:

**Motion:** "That the changes to the structure, size and composition of the Graduate

Council be approved, as set out in the attached document."

Respectfully submitted,

Dr. Paul Harrison, Chair

Senate Academic Policy Committee

#### **Graduate Council Restructuring**

The first page of this document provides some background to Graduate Council restructuring. The remainder of the document provides (a) the proposed Calendar entry and (b) the proposed bylaws for Graduate Council. The Calendar entry and the bylaws were approved by the Faculty of Graduate and Postdoctoral Studies at its meeting of 13 March 2014 and are recommended to the Senate for approval.

The Graduate Council was first established by Senate in 1986. Various powers and duties relating to the academic quality of graduate studies at the University, assigned to the Faculty of Graduate Studies, were thereby delegated to the Graduate Council. The membership of Graduate Council included 5 ex-officio members, 52 faculty members proportionally representing the various Faculties, and 7 student members, for a total membership of 64.

Over the years since then, the distribution of membership in Graduate Council across faculties and the total number of members have been modified on several occasions (1990, 1991, 2006, and 2011). The current membership of Graduate Council stands at 98, distributed as follows:

- ex-officio: Dean, Associate Deans, Vice-President Research & International, and Registrar (non-voting)
- faculty:
  - 2 members-at-large (faculty members of Senate elected by the Faculty of Graduate and Postdoctoral Studies)
  - 74 faculty members selected by the Faculties according to the following distribution: Applied Science (11), Arts (15), College for Interdisciplinary Studies (6), Commerce and Business Administration (2), Dentistry (1), Education (10), Forestry (3), Graduate Studies (0), Land and Food Systems (2), Law (2), Medicine (10), Pharmaceutical Sciences (1), Science (11)
- students:
  - 1 member-at-large (student member of Senate elected by students in the Faculty of Graduate and Postdoctoral Studies)
  - 14 student members elected by the Graduate Student Society

A periodic external review of the Faculty of Graduate Studies was conducted in 2011. A major recommendation of the review was that "the structure and role of the Graduate Council should be revised" and that "a much smaller body seems more sensible." The Provost subsequently struck a broad-based ad hoc committee to consider this and other recommendations arising from the external review. After extensive consultation, the ad hoc committee endorsed a model that is now reflected in the present proposal—a Graduate Council that is small enough to enable meaningful dialogue, deliberation, and engagement but large enough to be representative of the diversity of disciplines and program types.

Given the desirability of a smaller Council and the importance of having at least one representative for each Faculty, perfectly proportional representation by enrolment is not feasible, and so a hybrid model is proposed in which the smaller Faculties each are allocated one member and the larger Faculties each have three. Other proposed additions to the membership of Graduate Council include the Assistant Dean, two graduate program staff, and the Vice-President Students.

#### **Calendar Entry**

Homepage » Establishment and Constitution » Faculty Membership » Graduate Council <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=1,11,43,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=1,11,43,0</a>

egislative and administrative authority of the ty regarding graduate programs of study is d in the Graduate Council. In all matters
ty regarding graduate programs of study is d in the Graduate Council. In all matters
erning admission, scholarships, programs and inations, the Dean and Associate Deans act, the Registrar, as administrative officers for traduate Council.
clected membership of the Graduate Council des up to seventy five faculty elected by and members of the Faculty of Graduate es and two faculty members of Senate ed by the Faculty of Graduate Studies. There
Iso up to 14 members elected by and from ents registered in the Faculty of Graduate es and one student member of Senate ed by the students of the Faculty of Graduate es.  Ificio members include the Dean (Chair) and essociate Deans of the Faculty, the Registrar etary), and the Vice-President, Research.
iittir Hdree

#### **By-Laws of the University Graduate Council**

#### **University Graduate Council**

There shall be a University Graduate Council appointed by and responsible to the Faculty of Graduate and Postdoctoral Studies. The Dean and Vice-Provost, Graduate and Postdoctoral Studies, shall be the Chair of the Council.

#### 1. Membership

#### A. Faculty Members (22)

- i. The Faculties shall select 22 members as described in the Appendix, Distribution of Voting Membership. The selected faculty members must be members of the Faculty of Graduate and Postdoctoral Studies.
- **ii.** Each Faculty shall determine its own procedures for selecting its representatives.

#### **B.** Student Members (6)

- i. The Graduate Student Society shall elect 6 members. The elected students must be registered in the Faculty of Graduate and Postdoctoral Studies.
- **ii.** The Graduate Student Society shall determine its own procedures for electing its representatives.

#### C. Staff members (2)

- i. Two graduate program staff members shall be chosen by the Dean of Graduate and Postdoctoral Studies from a list of nominees provided by the Faculties.
- ii. Each Faculty shall determine its own procedures for selecting its nominees.

#### **D.** Ex officio members (with voting power unless otherwise noted)

- i. The Dean and Vice-Provost.
- **ii.** The Associate and Assistant Deans of the Faculty of Graduate and Postdoctoral Studies.
- **iii.** The Vice-President Students and the Vice-President Research & International or their delegates.
- **iv.** The two faculty members of Senate elected by the Faculty of Graduate and Postdoctoral Studies.
- v. The Registrar (non-voting; Secretary of Graduate Council).

#### E. Term of Membership

- i. The term of membership on Graduate Council for faculty and staff shall be three years.
- **ii.** The term of membership on Graduate Council for graduate students shall be one year.
- **iii.** There is no limit on the number of terms an individual may serve on Graduate Council.
- **iv.** If a member must be replaced, then a new member must be selected using whatever procedures the affected unit (Faculty or Graduate Student Society) deems proper.

#### F. Periodic Review and Adjustment

The Graduate Council shall review the allocation of members described above every five years and make appropriate changes.

#### 2. Powers and Duties

Under the University Act, the Faculty of Graduate and Postdoctoral Studies has various powers and duties relating to the academic quality of graduate studies at the University. Some of these powers are delegated to the Graduate Council, which is constituted as in

Section I and which operates as detailed in Section III. The powers and duties of the Graduate Council, acting on behalf of the Faculty of Graduate and Postdoctoral Studies, shall be:

- **A.** subject to Senate approval, and appeal to the Faculty of Graduate and Postdoctoral Studies, to make rules and regulations for the government, direction and management of the Faculty and its affairs and business;
- **B.** subject to Senate approval, and appeal to the Faculty of Graduate and Postdoctoral Studies, to determine the courses of instruction and programs in the Faculty of Graduate and Postdoctoral Studies, and to review proposals for changes in such courses and programs;
- **C.** to advise the Dean and Vice-Provost on scholarships and financial support for graduate students;
- **D.** to advise the Dean and Vice-Provost on strategic priorities for the continuous improvement of graduate education at the University; and, generally,
- **E.** to deal with all matters assigned to the Graduate Council by the Faculty of Graduate and Postdoctoral Studies and by the Dean and Vice-Provost.

#### 3. Operational Procedures

#### A. Meetings of Graduate Council

- i. There shall be at least four scheduled regular meetings of the Graduate Council in each academic session, September through May. A regular meeting may be cancelled by the Dean if there is neither urgent nor sufficient business. The agenda for each regular meeting shall be set by the Dean and sent to the membership of Graduate Council at least 10 days prior to the meeting.
- **ii.** Non-members of the Council may be included in any Council meeting by invitation of the Chair.
- **iii.** The quorum required for the transaction of business shall be not less than one half of the voting members.
- iv. The usual order of business shall be:
  - a) Approval of Agenda
  - **b)** Minutes of previous meetings
  - c) Membership
    - declarations of vacancies and new members
    - ratification of changes to membership of subcommittees
  - d) Unfinished Business from earlier meetings
  - e) Business Arising from the minutes
  - f) Chair's Remarks
  - g) Reports of Standing Committees
  - h) Reports of Other Committees
  - i) Other Business
- v. Any matter not already on the agenda of a regular meeting may, at the request of a member from the floor of the Graduate Council and at the discretion of the Chair, be included on the agenda under Other Business. Any member may request in writing to the Secretary of the Graduate Council an agenda item for the next meeting of the Graduate Council. A member may give notice of a motion from the floor of the Graduate Council and the motion shall be placed on the agenda for the next regular meeting.
- **vi.** The Registrar will perform the same duties for the Graduate Council as for the Faculties.

- vii. An additional meeting of the Graduate Council may be called to discuss particular topics. It may be called by the Chair of the Graduate Council at his/her discretion, but with the usual notice of meeting.
- viii. On any proposed recommendation(s) of the Graduate Council, an email ballot or a Special Meeting of the Faculty of Graduate and Postdoctoral Studies for the sole purpose of discussing the proposed recommendation(s) may be initiated by a request from either
  - a) 25% of the membership of the Council, or
  - b) 5% of the membership of the Faculty of Graduate and Postdoctoral Studies.
- ix. There shall be at least two meetings per year of the full membership of the Faculty of Graduate and Postdoctoral Studies, to allow the Dean to solicit advice from the membership and to report on the operation of the Faculty of Graduate and Postdoctoral Studies at the University.

#### B. Committees of the Graduate Council

- The standing committees of the Graduate Council shall include Policy, Curriculum, and Scholarships. Graduate Council may delegate its responsibility to a standing committee by a 2/3 vote. Members of the Graduate Council are eligible for membership on any committee. The Graduate Council may establish standing or ad hoc committees as needs arise.
- ii. Every Graduate Council committee shall be free to include additional members, who need not be members of the Graduate Council. Changes in a committee's membership shall be reported and ratified at the next regular Graduate Council meeting.
- **iii.** The terms of reference of each standing committee shall be approved by the Graduate Council.

#### Appendix: Distribution of Voting Membership (2014-19)

	2013 G+PS Enrolment	No.
Facult	y*	
Arts	1905	3
Education	1726	3
Medicine	1602	3
Science	1565	3
Applied Science	1556	3
Forestry	230	1
Land and Food Systems	177	1
Law	104	1
Graduate Studies	91	1
Commerce and Business	84	1
Administration		
Dentistry	77	1
Pharmaceutical Sciences	61	1
Students / Staff	/ Ex-officio	
Students (GSS)		6
Graduate program staff		2
VP – Students		1
VP – Research & International		1
Senators (faculty elected by the		2
Faculty of Graduate and		
Postdoctoral Studies)		
G+PS Dean, Associate and		5-6
Assistant Deans		
Total		39-40

<sup>\*</sup> Numbers reflect only students in degree programs which are the responsibility of G+PS (as of 1 November 2013).



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Vancouver BC V6T 1Z1

4 April 2014

To: Vancouver Senate

From: Admissions Committee

Re: English Language Requirements for Vantage College – ELS EAP Level 112

(approval)(circulated)

### English Language Requirements for Vantage College – ELS EAP Level 112 (approval)(circulated)

The Committee has reviewed and recommends to Senate for approval revised Calendar entry on English Language Requirements for admission to Vantage College. The proposal outlines entrance requirement equivalencies for other tests accepted by the University to satisfy the English Language Admission Standard.

The proposal also includes the addition of the ELS Educational Services' English for Academic Purposes (ELS EAP) as an appropriate entrance qualification for Vantage College. Data shows that students completing the highest level of EAP programming (Level 112) would be able to satisfy a TOEFL score of 70, the requirement for entrance to Vantage College.

The Committee recommends that Senate approve the addition of the ELS EAP as an English Language qualification for admission to Vantage College, for entry to the 2014 and 2015 Winter Sessions only. Approval on a two-year pilot basis will allow the Undergraduate Admissions to collect data on the number of applicants presenting the ELS EAP for admission and better determine whether the test should be used on an ongoing basis.

Motion: That Senate approve the proposed Calendar entry on English Language Qualifications for admission to Vantage College; and

That Senate approve the ELS Educational Services English for Academic Purposes Level 112 (EAP Level 112) as an English language qualification to satisfy English proficiency requirement for admission to Vantage College, for the 2014 Winter Session and 2015 Winter Session only.

Respectfully submitted,

Dr. Robert Sparks Chair, Senate Admissions Committee



#### THE UNIVERSITY OF BRITISH COLUMBIA

## **UBC Admissions Proposal Form Admission Requirements**

Effectiv	e UBC Vantage College e Session: 2014W r Change: 2014W		Date: Feb20, 2014 Contact Person: Sam Saini Email: sam.saini@ubc.ca	
URL for	Calendar:			
http://wv	ww.calendar.ubc.ca/vancouver/index.cfm?tre	e=12,307,939,0		
Homepa Admissi	nge > Faculties, Colleges, and Schools > UF on	BC Vantage College >		
Propose	d Calendar Entry:		Present Calendar Entry:	
The langu Before be	anguage Requirements age of instruction in the UBC Vantage College Internating granted admission into the College, applicants munglish proficiency.		English. Before being granted admission	
	<b>English Language Qualification</b>	<b>Entry Requirements</b>	demonstrate a suitable level of English p	
CAE	Certificate in Advanced English	CEFR Level B2	English Language Qualification	<b>Entry Requirements</b>
CAEL	Canadian Academic English Language	Overall 50	IELTS (Academic)	Overall 5.5
	Assessment			Minimum Band Requirements
	With the speaking sub-test	40		Speaking 5.0
CEL	UBC Certificate in English Language	400		Reading 5.5
CELPIP	Canadian English Language Proficiency Index			Writing 5.5
	Program			Listening 5.0
	CELPIT-A (Academic Reading and Writing)	3L	TOEFL iBT	<del>70</del>
	CELL (Listening)	3L		No section less than 16
	CELTOP (Speaking)	3L		
СРЕ	Certificate of Proficiency in English	N/A		
IELTS	International English Language Testing System (Academic)	5.5 overall Minimum 5.0 in Speaking and Listening		

#### THE UNIVERSITY OF BRITISH COLUMBIA

<b>UBC</b>

Minimum 5.5 in Reading and Writing

MELAB Michigan English Language Assessment Battery 70 final score

PTE Overall Score: 48 **Pearson Test of English (Academic)** 

Reading: 43

Listening: 43

Writing: 43

Speaking: 43

**TOEFL** Test of English as a Foreign Language

**Either the Paper-based test** 50

With the TWE (Test of Written English) 3.0

Or the Internet-based test Overall Score: 70

Reading: 16

Listening: 16

Writing: 16

Speaking: 16

EAP Level 112

**ELS ELS Educational Services - English for EAP** 

Academic Purposes

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

Update Calendar entry to list all English Language Qualifications that can be presented to satisfy the English proficiency requirement.

Demonstrate the entrance requirement equivalency for the other tests that UBC accepts to satisfy the English Language Admission Standard.

Additionally, to add ELS Educational Services' English for Academic Purposes as an appropriate entrance qualification for Vantage College

#### **Rationale:**

The CAE, CAEL, CEL, CELPIP, CPE, IELTS, MELAB, PTE and TOEFL are acceptable to meet UBC's English Language Admission Standard. The creation of equivalencies for the other tests that UBC traditionally accepts to meet ELAS will help clarify entrance requirements for students who may be enrolled in these programs. Currently it is not clear that other tests are acceptable.

The equivalencies generated were based on concordance studies produced by the individual test providers and compared to languages benchmarks provided via CEFR (Common European Framework of Reference for Languages)

The new addition is the acceptance of ELS Educational Services and their English for Academic Purposes program to meet an entrance requirement for Vantage College. ELS operates English schools at a number of American university and college campuses and has two centers in Canada as well (Vancouver and Toronto). ELS has provided UBC with data that suggests that students completing their highest level of EAP programming (Level 112) would be able to suitably meet a TOEFL score of 70 (the requirement for entry to

# UBC

#### THE UNIVERSITY OF BRITISH COLUMBIA

Vantage College). For these reasons, ELS' EAP program could be
used as an appropriate entrance qualification for admission to
Vantage College.

# Comparison of Academic Achievement and English Proficiency Indicators Between ELS and Non-ELS International Students

## Summary of a ELS Short-Term Validity Study

Prepared for

**ELS Educational Services** 

By

Knapp & Associates International, Inc. and Buros Center for Testing

August 2012



#### **Preface**

In November 2010, ELS Education Services (ELS) contracted with Knapp & Associates International, Inc. (Knapp), to develop a long-range validity strategy, including a short-term project, for ELS' English for Academic Purposes program. ELS' goal for the projects included in this validation strategy is to demonstrate the value of the ELS English for Academic Purposes Program in a way that positions it as an academic preparation program that leads to successful academic outcomes, not as a program that prepares students to take courses conducted in English or a test that measures a student's ability to speak, read and understand English.

It is important that ELS' claims for value and quality be supported by an objective, third-party entity so that these stakeholders view the ELS claims as credible and do not perceive its attestations as selfserving. Such a strategy could conceivably also contribute to the research in the field of English as a Second Language by showing what type of academic preparation would lead to successful educational outcomes for students and academic institutions.

Such a strategic effort will require ELS headquarters to develop a long-range strategy in the future that includes the development of a database, collection of critical data from the partner schools and their faculty on a continuous basis and a plan for analyzing the data routinely. This research would substantiate ELS claims that its students are better prepared for the rigors of academic life and have a high probability of completing their education. It also provides ELS with information regarding the quality of its instructional program and the instructors/faculty who deliver the courses.

The current short-term validity study was designed to lay the foundation for the long-term validity strategy. Activities included determining the availability of relevant historical data from ELS partner schools and comparing groups of students who fulfilled college English proficiency requirements under two different scenarios (graduated from the ELS English for Academic Purposes program versus high scores on the TOEFL or IELTS tests) on a set of variables concerned with performance in college other than grade point average and graduation rates. Thus, the short-term study will provide the foundation for the longer term plan by recruiting and obtaining the commitment of partner schools, determining the availability of academic performance data and establishing a relationship with a third party for future research studies.

Staff from Knapp developed a research plan and, with ELS Educational Services and partner schools, worked to identify relevant variables, design file layouts, develop time lines, and discuss issues and constraints during the study. The Buros Center for Testing was engaged to provide an objective and rigorous analysis of the collected data, the results of which are reported on the following pages (taken directly from Römhild and Chin, 2012).

#### **Executive Summary**

This report summarizes the findings of the independent data analysis conducted by the Buros Center for Testing in which academic and English language performance indicators were compared across two groups of English language learners enrolled at four U.S. universities. The two groups were composed of college students who gained college admission either through completion of the English for Academic Purposes program offered from ELS Education Services or by meeting alternate English language admissions criteria such as the TOEFL or IELTS. The goal of the study was to examine evidence regarding the comparability of the two ELS groups in terms of English language proficiency and academic performance.

A variety of outcome measures were examined in this study, including academic performance indicators (i.e., first-term GPA and cumulative GPA), English language performance indicators (i.e., average grade in English/Language Arts classes and ACT COMPASS scores), and graduation indicators (i.e., number of terms to graduation and graduation rate) where data was available. Since the focus of this study is on the comparability of the ELS and non-ELS groups' performance, a concern arose that additional demographic differences, such as discrepancies in country representation and degree level, might produce confounding effects in the analyses. This issue was addressed by statistically controlling for these differences whenever feasible. In this study, we frequently observed that degree level and country of origin mediated the effect of ELS membership on the performance indicators. The inclusion of these variables, therefore, helped to focus the comparisons more precisely on the differences that are due to ELS group membership.

Overall, we found that on measures of academic performance (first-term GPA and cumulative GPA) and length of study, ELS students perform similarly to their non-ELS peers. Although the mean differences tended to favor the non-ELS groups more often, the reverse pattern was also observed for

specific countries and degree levels. The results on measures of English language performance show that the ELS and non-ELS students did not have statistically significant differences on average grade in English/Language Arts courses and EAP Placement Test scores.

Given the exploratory nature of this study, we strongly recommend that additional studies be carried out to gather further corroborating evidence. Such studies should pay special attention to the inclusion of demographic variables, in particular country of origin and degree level. In addition, we recommend exploring other potentially confounding variables such as school type, degree program, GPA at time of admission, and prior enrollment in an English-speaking high school or undergraduate degree program. None of these factors had been considered in this study. We also recommend using a broader sample of schools that would benefit the generalizability of the findings and therefore strengthen the validity argument. Lastly, future studies should give careful consideration to the design and execution of the data collection plan in order to facilitate the pooling of data from participating schools.

#### The Study

#### Introduction

ELS Education Services provides English instruction to non-native speakers seeking admission to colleges or universities in the U.S., Canada and Australia. The ELS English for Academic Purposes program allows graduates of the program, i.e., those who have completed Masters levels 110 to 112, to fulfill the English language proficiency requirement for admission to many of ELS' U.S. partner universities and colleges. To evaluate the appropriateness of using ELS program completion as criterion for college admissions decisions, the Buros Center for Testing was engaged by Knapp to conduct an independent study, which is presented in this report.

The goal of the ELS validity study is to seek evidence concerning the utility of the ELS program to prepare college applicants with sufficient English skills that allow academic study uninhibited by language. Because English language proficiency is a necessary but not a sufficient skill for successful academic performance, the study does not focus on how well ELS graduation predicts academic success, but rather focuses on the comparability of ELS students' performance on indicators of academic and English language achievement to the performance of other non-English-speaking students who met alternative language-related admissions criteria such as the TOEFL test.

#### Methods

We examined student performance data from five ELS partner universities: Adelphi University (Adelphi), University of Cincinnati (Cincinnati), Fairleigh-Dickinson University (FDU), Indiana University – Purdue University Indianapolis (IUPUI), and St. Joseph's University in Philadelphia (St. Joseph's University). All participating schools provided information on students' GPA, either firstyear and/or cumulative GPA. Some schools also provided additional information including grades for English/Language Arts courses, ACT/COMPASS scores, and graduation dates and degrees received. Of the five participating schools, four provided performance data for both ELS and non-ELS international students. Using analysis of variance procedures we compared the performance on the provided indicators across ELS and non-ELS student groups, testing the statistical equivalence of the performance of the two groups. To examine graduation-related data, we focused our analyses on students who had already graduated with a degree and examined length of time to graduation (i.e., total number of academic terms). This approach allowed us to differentiate among types of degrees that require different lengths of study (e.g., Bachelor, Master, Doctor). In addition, we computed graduation rates for specific student cohorts based on first year of enrollment. However, the graduation rates do not reflect differences due to degree type as that information was not available for students who hadn't yet graduated. Therefore, the information gained from the graduation rates is generally of limited value.

Some of the challenges in this study concern the differences in the demographic composition and sample size between the ELS and non-ELS groups as well as the lack of data from some schools. Since the focus of this study is on the comparability of the ELS and non-ELS groups' academic and English language achievement, a concern arose that additional demographic differences, such as discrepancies in country representation, might produce confounding effects in the analyses. The non-ELS samples were generally more diverse, representing a larger number of countries and overall smaller percentages of students per country. In contrast, the ELS groups tended to over-represent specific countries. The differences in sample size were often quite extreme; in three schools the non-ELS samples exceeded the size of the ELS samples by a factor of 10. In addition, most of the performance indicators did not meet the statistical distribution assumptions of normality and equal variances, which affect the power of the significance tests in the study. We attempted to address the limitations in the data in two ways. First, we trimmed the samples to include only students from countries that were represented in both the ELS and non-ELS groups. This step produced country representations that were more similar overall

and reduced the sample size differences considerably, though imbalances remained. In addition, we included country membership and degree level as an independent variable in the analyses whenever feasible, in order to remove potentially confounding effects on ELS group comparisons. Overall, these measures alleviated some of the data issues in this study, but they did not eliminate concerns regarding the statistical power of the analytic procedures used.

Only three schools provided country information for both groups. Across all five schools, China, Japan, Saudi Arabia, South Korea, and Taiwan were among the countries with the largest numbers of students. Combined they made up between 64% and 96% of the trimmed ELS and non-ELS samples. An additional set of 7 to 24 countries represented the remainder of these samples. Actual analyses were performed on a subset of the trimmed data sets due to missing data in the performance indicators. The analyses of graduation-related data also required the additional step of filtering out all transfer students, which reduced available sample sizes further.

In order to distinguish between performance differences due to ELS membership from other confounding effects such as country of origin and degree level (i.e., graduate or undergraduate), we strove to include all three factors in the analyses whenever there was sufficient sample size within individual cells. Using a full-factorial design, we performed three way mixed effects ANOVAs with ELS membership and degree level as fixed effects and country membership as a random effect. The specific countries included in the country factor changed across analyses depending on the degree of missing data in the performance indicators. Countries with insufficient numbers were combined into one category labeled "Other." In some instances, the samples were too small to include either country or degree level as independent factors.

Given the exploratory nature of this study, we chose not to combine school data into one large data set. Instead, we performed analyses separately for each school as differences in academic policies and characteristics between the schools may have affected the comparability of the academic performance indicators. There was also a concern about the equivalence of the data codes used by the different schools.

#### **Conclusions and Recommendations**

The purpose of the ELS validity study is to provide evidence regarding the adequacy of English language skills of ELS program graduates for postsecondary education. English language skills are necessary prerequisite skills for non-English students to engage in academic studies in meaningful and productive ways. They enable students to access instructional content and to participate in academic activities without language interference. Once students have attained sufficient English language skills, however, their level of language proficiency is less strongly related to academic success, and other factors such as knowledge of the academic discipline, study habits, personal circumstances and institutional support become more important (Chalhoub-Deville, 2006; Graham, 1987). This pattern has implications for how expectations concerning the validity of ELS program graduation are framed. Specifically, the focus of the validity study was on the utility of the ELS program in equipping college applicants with sufficient English language skills and not as a predictor of academic success per se. To this end, the validity study focused on comparing the performance of ELS program students to the non-ELS group (e.g., TOEFL-selected international students), with the expectation that overall performance is comparable for these groups.

The student samples in this study were selected to comprise international students who are non-native speakers of English. We examined the performance of two groups of college students (ELS and non-ELS students) across four U.S. universities (Adelphi, Cincinnati, IUPUI, and FDU). Because the non-ELS samples were more diverse than the ELS samples, which tended to over-represent specific countries, the ELS and non-ELS students were further matched by their country of origin to form the "trimmed" sample for analysis. In addition, whenever feasible, control variables accounting for differences due to student's country of origin and degree level were included in order to remove the potentially confounding effects on student performance. Separate sets of analyses were conducted for each of the four schools. Since only limited data were available for the ELS students from St. Joseph's University, comparisons could not be made for this university with the current data.

Three kinds of outcome measures were examined in this study: academic performance indicators, English language performance indicators, and graduation indicators. Academic performance indicators were first-term GPA and cumulative GPA. English grade averages and EAP Placement Test scores were included as the English language performance indicators. Lastly, we examined the number of academic terms to graduation and reported graduation rates by year of enrollment.

Across the four universities, we found that ELS students generally performed similarly to their non-ELS peers in terms of first-term GPA and cumulative GPA. Although the mean differences tended to favor the non-ELS groups more often, the reverse pattern could also be observed within specific country and degree level combinations. We found that, in three of the four schools, the effects of ELS on GPA were either statistically not significant, worked in opposite direction for the two degree levels, or the effect size was negligibly small. In one school, we observed a large, statistically significant effect of ELS on GPA, which favored the non-ELS group. Overall, a consistent pattern of higher GPA performance of non-ELS students over ELS students did not emerge in this study. The results also suggest that country of origin, degree level, and school are important factors to consider when exploring the effects of ELS programs on GPA.

Our comparison of the performance of ELS groups on indicators of English language proficiency – average grades in English/Language Arts courses and EAP Placement Test scores – revealed no statistically significant difference in performance.

In addition to academic and English language performance indicators, this study also considered time to graduation as a measure of academic progress and success. We found that both groups had comparable lengths of time to graduation.

The results and conclusions based on this study should be interpreted with caution. Throughout the study we attempted to include potentially confounding factors such as country of origin and degree level in order to tease out these effects on student performance. However, due to small cell sizes in some conditions, we were unable to include these factors in every analysis. In addition, there are other potentially confounding variables that we would have liked to include in this study but that were not available to us. For example, two factors not considered in this study but that could have given non-ELS students an advantage include prior attendance of an English-speaking high school and prior undergraduate study in the US by non-ELS students. Other potentially confounding factors include students' degree program (e.g., engineering, language arts, physical sciences) and the GPA level at time of admission to the university.

For this study, we made the decision to analyze schools separately, since variables were often coded inconsistently across schools. On some indicators, we obtained different results across schools, which suggest that school could also mediate the effects of ELS programs on academic and language performance indicators. For future studies, it is recommended that school be considered as one of the independent variables in the analytic design.

As collecting empirical evidence to make validity arguments is a constant activity for any strong assessment or intervention program, we urge ELS Education Services to continue this effort in the future. Future studies should consider broadening the sample of schools in order to generalize the validity arguments to various types of schools. In addition, a systematic data collection design will be beneficial to ensure data consistency when receiving data files from different schools. In this study, we observed very different data structures and coding schemes across schools that would have encumbered analyses on the pooled data. A systematic data collection design will also facilitate longitudinal study with which the trend of the ELS effects can be monitored.

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Institution		<b>ELS Level Accepted</b>	TOEFL iBT	IELTS	
Clemson University	undergraduate	n/a	n/a	n/a	Does not offer undergraduate programs
	graduate	112	80	7	
Texas Tech University	undergraduate	112	. 79	6.5	
	graduate	112	. 79	6.5	
Marquette University	undergraduate	112	. 76	6.5	
	graduate	112	80	6.5	
University of Cinncinati	undergraduate	112	. 66	6.5	
	graduate	112	100	7	
SUNY - Brockport	undergraduate	112	. 79	6	
	graduate	112	. 79	6	
Indianapolis University - Purdue University - Fort Wayne	undergraduate	112	. 79	6.5	
	graduate	112	. 87	6.5	
Indianapolis University - Purdue University -Indianapolis	undergraduate	109	61	5.5	
	graduate	112	80	6	
Northern Illinois University	undergraduate	112	. 71	6	
	graduate	112	80	6	
The University of Texas at Dallas	undergraduate	112	80	6.5	
	graduate	112	80	6.5	
Southern Polytechnic State University (Georgia)	undergraduate	112	. 79	6.5	
	graduate	112	. 79	6.5	
University of North Dakota	undergraduate	112	. 71	6	
	graduate	n/a	n/a	n/a	
Louisiana Tech University	undergraduate	112	. 71	6.5	
	graduate	112	81	6.5	



Office of the Senate

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4 April 2014

To: Vancouver Senate

From: Senate Admissions Committee

Re: International Undergraduate Student Admission – Reconsideration of the

May 1996 Senate Resolution

Motion 1: That Senate receive the report on "International Undergraduate Student

Admission – Reconsideration of the May 1996 Senate Resolution;

*Motion 2:* That the May 1996 Admission Policy for International Students be

rescinded;

*Motion 3:* That the revised Principles of Effective Undergraduate Admission to UBC

be approved;

Motion 4: a. That international students not displace Canadian citizens and

permanent residents for admission to the University;

b. That international students be admitted to undergraduate programs using criteria and procedures which ensure, at a minimum, international

student quality comparable to that of domestic students; and

c. That enrolment targets presented by Faculties and Schools to Senate for approval include specific targets for the number of international students proposed for admission to each Faculty and School for the following

academic session.

#### **Summary:**

The provincial government funds UBC for a specified number of domestic undergraduate students (Canadian Citizens and Permanent Residents). For 2013-2014, the undergraduate funding is for 29,437 FTE. UBC is committed to managing the admissions process to achieve this mandated number. International students do not displace domestic students in the achievement of this mandate. Current Senate policy on admission of international students limits enrolment to a maximum of 15% of domestic students registered in each program in the previous year. This limit no longer supports the strategic goals and priorities of the University. The Committee proposes a revised policy, as per the motions set-out above, that enables the University to meet its internationalization and diversity goals while ensuring that decisions related to international enrolment take account of domestic student access to programs of study, the University's capacity



to accommodate increasing student numbers, and equitable admission standards for international and domestic students. The changes proposed by the Committee are as follows:

- 1. That the *Principles of Effective Undergraduate Admission to UBC* (hereafter the *Principles*), which inform all admission policies, be revised to:
  - articulate a commitment to non-displacement of domestic students ('Non-displacement)
  - o specify that enrolment will be limited to the number of students the University can provide with an excellent educational experience ('Capacity'),
  - o specify that admission will be based on diverse criteria and that the criteria by which applicants will be evaluated will be applied in a fair and consistent manner ('Excellence of Fit'), and
  - o reflect the University's goals on internationalization and student diversity ('Alignment with UBC's Vision and Values').
- 2. That Faculties and Schools set international undergraduate enrolment targets in accordance with the *Principles*.

#### **Background:**

The University's strategic plan, *Place and Promise*, emphasizes the importance of creating a learning environment that encourages global citizenship and awareness of global issues, and it identifies internationalization as a core value, principle and goal of the University. The two leading goals in the international engagement strategy are to increase the capacity of UBC students, faculty, staff, and alumni to engage internationally and to strengthen UBC's presence as a globally influential university.

The University has raised its international profile by selectively expanding the number of active partnerships with preeminent international research and teaching institutions in the areas of undergraduate and graduate education via joint and dual-degree programs and by increasing the number of study abroad initiatives at both the undergraduate and graduate levels. The University has also sought to increase the number of international graduate and undergraduate students enrolled at UBC, and to develop programs and allocate resources to ensure their success. The recruitment of international students to study at UBC and the broad range of international educational experiences now available to all students at UBC serve to diversify the student experience and support the University in its efforts to become a more globally engaged institution.

The Committee reviewed the current Senate policy (May 15, 1996) on international undergraduate student admission in light of the University's international strategic plan and implementation strategy for the plan, and found that the 1996 policy is out of step with and does not support the University's strategic goals and priorities.

The May 1996 Senate resolution was intended to support the transition from a previous system where fees were not differentiated between international and domestic students to one where non-Canadian students would be charged a higher, "market rate" tuition. It sought to protect the level of access that Canadian citizens and permanent residents had to UBC's undergraduate programs (i.e., non-displacement), and the standards and quality of these programs by setting three conditions for admission of international students to academic programs. The first required that international student admission GPAs meet or



exceed those of domestic students. The second set a maximum quota for international students of 15% of the number of domestic students registered in the program the previous year. The third required faculties and schools to identify the number of supernumerary international students – the number of international student places beyond the University's funded capacity – in the annual presentation of admission quotas to Senate. (See Appendix A.)

The Committee noted that the University's priorities have changed markedly since 1996. In the present context, internationalization is a core commitment of *Place and Promise*, and market-based tuition for international undergraduate students is a core component of the University's budgetary model. In addition, the University now accepts students on the basis of a Broad Based Admissions process that includes measures other than GPA. In 2008, Senate approved the Principles of Effective Undergraduate Admission, which need to be taken into account in all admissions policies, including policies relating to international student numbers.

#### **Current UBC Educational Context**

A key focus of UBC today is to prepare internationally knowledgeable graduates, who are aware of global issues and of the multiple perspectives on those issues, and able to work in an increasingly globalized world. An important potential site of learning for these students is their interaction with international peers who bring different experiences and perspectives to the University. UBC students themselves see it this way. The 2012 *New to UBC* survey found that 74% of students rated "Improving [my] understanding of other countries and cultures" as a goal that was either 'essential' or 'very important. The benefits are intellectual and practical – employers want students that will be effective working in foreign countries and working in teams of diverse individuals. As President Toope notes "[i]nter-cultural knowledge, skills and networks ... are essential for individuals and businesses to thrive in today's global economy". 2

While students themselves see the benefits of international academic engagement, the Canadian and BC governments are also advocating for greater numbers of international post-secondary students. The motivations vary: post-secondary education is seen as an export industry by some, as a source of skilled and talented immigrants by others, as a mechanism to help in capacity building in the developing world by some, and as a means to build international populations familiar with Canadian values and perspectives by others.

The University's international engagement strategy identifies mechanisms to meet its international commitments in *Place and Promise*, and these include goals of increasing

<sup>1</sup>PAIR *New to UBC (NUBC) Student Survey* - Report on Direct Entrants: UBC Vancouver Snapshot 2012 2 "Strengthening education and research connectivity between Canada and Asia: Innovative models for engagement" Toope July 2012 (http://www.ceocouncil.ca/wp-content/uploads/2012/08/Strengthening-education-and-research-connectivity-between-Canada-and-Asia-Stephen-Toope.pdf).



the proportion of international students on campus, as well as expanding exchange programs and international community service learning.

#### **Budgetary Context: Then and Now**

In 1996, the contribution of market-based tuition to the University operating budget was very limited, and the target of 15% international undergraduates was considered a distant (potentially unreachable) goal. International student tuition fees were set to reflect the approximate real cost of educating an undergraduate student. The goal was to build a cohort of international students who would pay for their own seats, bring new monies to the University and not reduce the spaces for domestic undergraduates.

Now, international tuition is a significant component of the base operating budgets of both Faculties and central administration. For the Vancouver campus, international tuition revenue for the academic year 2013/2014 was approximately \$106 million, representing roughly 10% of the campus operating revenue. International enrolment has grown by 45% over the last 5 years and planning assumptions anticipate international enrolment increasing at 9% per year over the next five years.<sup>3</sup>

#### **Undergraduate Student Enrolment Targets**

Enrolment targets for domestic undergraduate students are set by the University in response to the Provincial government's funded Full-Time Equivalent (FTE) seats. The total number of funded FTE seats are set by the Province annually, in the Provincial letter, and constitute the main source of funding for the University. For 2013/2014, the government-funded domestic undergraduate FTE is 29,437. The University endeavors to match actual domestic enrolments with the provincial targets through its admission targets. These are set in terms of head count, and are intended to enable the University to maintain overall domestic undergraduate enrolments by anticipating flow through and completion rates. Costs are incurred from carrying domestic student FTE above Provincially funded rates, because domestic student tuition alone does not cover the actual costs of educating a student. For 2013/2014 the Vancouver campus is 675 FTE above the Provincial targets, and current plans are to slightly reduce domestic student admissions over the next two years to bring this figure down to 380 FTE (see Table 1).

By contrast, enrolment targets for international undergraduate students are set by the University based on its strategic goals and physical, instructional and support services capacities. International undergraduate student tuition covers the full cost of educating the student and thereby helps fund the fixed overhead costs for all students. Included in the latter are physical, instructional and student support services that benefit all students, domestic and international. Approximately two-thirds of international student tuition revenue is allocated to the Faculties (shared between program and course enrolments) and one-third allocated to central administration. Accordingly, international students

<sup>&</sup>lt;sup>3</sup> Growth from 3047 students in 2008 to 4775 in 2013. UBC Annual report on Enrolment 2013/14. Vancouver campus



strengthen the University not only through their participation and engagement on campus but also by supporting the fiscal capacity of the University.

#### <u>Undergraduate Student Admissions Criteria</u>

The University's domestic student admission criteria are set on the basis of demand for the number of domestic undergraduate seats which, as noted above, is set on the basis of provincially funded FTE seats. Demand for domestic seats is mainly a local condition (57% of new domestic direct-entry registrants are from BC schools, 2013W) and far exceeds the supply of seats funded by the Province. The result is an inflationary pressure that year-over-year during the last decade and a half has tended to drive up the minimum GPA required for admissions to most programs. This effect has been slightly offset by the introduction of Broad Based Admissions (BBA) but has not been eliminated. The addition of the Personal Profile scoring system to GPA has broadened the selection criteria but not overturned the high local demand for domestic seats.

By comparison, demand for international student seats reflects global markets and global trends. UBC competes for international student applicants with a wide range of other institutions all over the world that aggressively recruit in the same markets. These institutions employ a variety of measures to gain students, including differentiated admissions. One of these is the 'international pathways' approach, which is intended to accommodate high achieving students in a transition program that assists them with English language. At UBC, the Conditional Admission Program and Vantage College provide such pathways.

#### International Student Enrolment Targets and Admissions Criteria Revisited

The Committee supports replacing the quota system in the 1996 resolution with a principles-based approach that sets enrolment targets for international undergraduate students on the basis of the University's goal to become a global institution and its capacity to provide all of its students, domestic and international, with an excellent educational experience. In accordance with the *Principles of Effective Undergraduate Admission*, the Committee is advising that international undergraduate student admission criteria can and should be set on the basis of the University's strategic priorities, the capacity to provide all students with an excellent educational experience, and on an evidence-based review that would identify predictive criteria for international students who will prosper at UBC.

Expansion of international undergraduate seats is in line with the Provincial mandate to develop a highly internationalized education system. With respect to fiscal planning, international student tuition revenue can benefit the entire undergraduate student population and teaching enterprise through contributing to recruitment and retention of top quality faculty, provision of additional course sections that reduce class size and increase the breadth of offerings, expansion of library collections and services for students, and construction of new and renewal of existing instructional spaces, equipment and technology. International students strengthen the University not just through their



presence and engagement on campus but also by supporting the fiscal capacity of the University.

In 2013/14 there are 6,326 international undergraduate students, of whom 5,132 are registered in undergraduate degree programs on the Vancouver campus comprising 16% of the undergraduate degree population. The students come from over 150 different countries, but China and the US are home to approximately 40% (Table 3). The campus-wide proportion of international students incorporates the widely divergent share of international students in different programs and Faculties as demonstrated by the proportions in undergraduate direct entry degree programs in Table 4. The University is currently targeting a 9% annual increase in international undergraduate degree student enrolments.

#### Revised Principles of Effective Undergraduate Admission to UBC

The 2008 Senate-approved Principles provide guidance for decision-making around student admissions. The proposed revisions to the Principles, set out in the attached draft document, reflect the importance of internationalization in the context of University admissions and the learning environment.

A key component of the revised Principles is non-displacement of domestic students. The principle of 'Non-displacement' specifies that international students will not displace domestic students. In addition, it specifies that the University will meet its provincially mandated enrolment targets for Canadian citizens and permanent residents and that all provincially funded seats will continue to be occupied by Canadian citizens and permanent residents of Canada.

The revised Principles also reflect the importance of considering capacity and resources in decisions related to both international and domestic enrolment. A fundamental principle of effective admission is to ensure that the University provides every student with a rewarding and complete learning experience and only admits a number that can be assured of such an experience. Going forward, the Committee emphasizes that the University (and Faculties) must carefully consider resource and capacity implications when setting international enrolment targets.

Respectfully submitted,

Dr. Angela Redish Vice Provost Enrolment and Academic Facilities

Dr. Robert Sparks, Chair Senate Admissions Committee





**Unfunded FTE** 

Table 1: UBCV Undergraduate Program Normal Load FTEs (Domestic)

**Winter Session** Forecast → Faculty 2010/11 2011/12 2012/13 2013/14 2014/15 2015/16 **APSC** 3,356 3,393 3,480 3,297 3,251 3,193 ARTS 7,485 7,560 7,646 7,445 7,313 7,228 COMM 2,338 2,316 2,377 2,337 2,319 2,284 DENT 346 334 331 330 318 315 **EDUC** 1,937 1,774 1,731 1,796 1,880 1,912 **FRST** 398 454 434 463 470 473 LAW 519 540 528 535 535 532 LFS 827 916 954 920 927 923 **MEDI** 1,093 1,137 1,179 1,248 1,283 1,288 **PHAR** 497 741 808 880 894 673 SCIE 5,453 5,450 5,644 5,582 5,596 5,583 Non-Degree & Residents 2,085 2,195 2,087 2,154 2,154 2,121 **ALL UG Programs** 26,334 26,742 27,165 26,848 26,926 26,779 **Summer Session** 3,514 3,326 3,311 3,264 3,264 3,264 **Total Winter plus Summer** 29,848 30,068 30,476 30,112 30,190 30,043 Funded 29,110 29,214 29,323 29,437 29,551 29,665

NOTE: Includes all undergraduate direct entry, post-baccalaureate, diploma, certificate and non-degree students

1,153

675

639

378

854

Table 2: UBC Vancouver, Headcount Enrolment by Visa Status

738

		2010			2011			2012			2013		
		Domestic	Intl	% Intl									
Graduate	Doctoral Degree	2,328	1,189	34%	2,319	1,341	37%	2,274	1,453	39%	2,206	1,472	40%
	Masters Degree	4,753	1,359	22%	4,814	1,486	24%	4,774	1,525	24%	4,660	1,574	25%
	Graduate Total	7,081	2,548	26%	7,133	2,827	28%	7,048	2,978	30%	6,866	3,046	31%
Undergraduate	Diploma & Certificate	2,225	111	5%	2,104	112	5%	2,064	108	5%	2,039	130	6%
	Non-Degree	1,893	830	30%	1,772	939	35%	1,550	916	37%	1,371	1,036	43%
	Post-Baccalaureate Degree	2,640	5	0%	2,539	14	1%	2,472	11	0%	2,522	18	1%
	Residents	1,131	27	2%	1,182	20	2%	1,223	9	1%	1,259	7	1%
	Undergraduate Degree	25,452	3,506	12%	25,760	3,882	13%	26,442	4,417	14%	26,467	5,135	16%
	Undergraduate Total	33,341	4,479	12%	33,357	4,967	13%	33,751	5,461	14%	33,658	6,326	16%
Total		40,422	7,027	15%	40,490	7,794	16%	40,799	8,439	17%	40,524	9,372	19%



Table 3: International Undergraduate Enrolment by Country of Citizenship

COUNTRY	2006	2006 % of Total	2013	2013 % of TOTAL
China	682	18%	1,785	28%
United States	718	19%	750	12%
Korea, South	363	10%	429	7%
Japan	259	7%	280	4%
India	61	2%	200	3%
Hong Kong	158	4%	187	3%
United Kingdom	116	3%	181	3%
Malaysia	47	1%	178	3%
Indonesia	136	4%	158	2%
Singapore	73	2%	132	2%
Australia	89	2%	91	1%
Saudi Arabia	68	2%	46	1%
Germany	64	2%	84	1%
Others	854	23%	1,825	29%
Total	3,688	100%	6,326	100%

Table 4: ISI as a Proportion of Total Direct Entry Undergraduate Degree Programs

Direct Entry Programs	2011/12	2012/13 Forecast	2012/2013	2013/2014
Applied Science – BASC	15%	15%	15%	17%
Arts – BA/BFA/BMUS	17%	18%	18%	20%
Sauder – BCOM	26%	27%	27%	31%
Kinesiology – BKIN	6%	6%	6%	6%
Forestry – All UG Programs	19%	24%	24%	25%
LFS – All UG Programs	2%	2%	12%	14%
Science – BSC/BCS	7%	7%	7%	9%
Total All Direct Entry	14%	15%	15%	17%



#### Appendix A – May 1996 Senate Resolution

On May 15, 1996, Senate approved a three-part resolution regarding admission of international undergraduate students, as follows:

That international students be admitted to undergraduate programs at a GPA or admission average that is no lower than the minimum GPA or admission average applicable to Canadians or permanent residents of Canada entering the same program, i.e., that the present differential GPA applied to domestic and international applicants be discontinued.

That the maximum number of international students admitted to and registered in an undergraduate program in any year be established at 15% of the number of Canadians and permanent residents registered in that program in the previous year.

That faculties and schools, in presenting admission quotas to Senate for approval, also be required to present for approval the number, if any, of supernumerary international students they expect to admit.



#### THE UNIVERSITY OF BRITISH COLUMBIA

#### Revised Principles of Effective Undergraduate Admission to UBC

## REVISED PRINCIPLES OF EFFECTIVE UNDERGRADUATE ADMISSION TO UBC (20 MARCH 2014)

#### ALIGNMENT WITH UBC'S VISION AND VALUES

Admission policies shall ensure that the institution attracts the best undergraduate students from across BC, Canada and the world. Students admitted to the University shall be predisposed to take advantage of the opportunities to seek academic challenge, to do research, to develop leadership skills, to do community service, to foster global awareness, and to participate in sports and the fine and performing arts.

Corollary: Policies or practices that encourage top-quality student applicants will be identified and reviewed.

Corollary: Where two or more principles are in conflict, the resolution should always aim to achieve the overall vision and values of the University.

#### **EVIDENCE-BASED POLICY REVIEW:**

Admission criteria will be based on knowledge of the strengths and weaknesses of educational systems world-wide and of student performance at UBC.

Corollary: Student achievement at UBC will be used regularly to review and modify admission policies and practices, and to identify areas of potential improvement in UBC curricula and pedagogy.

Corollary: The University needs the ability to forecast changes in demand for programs so that policies can be adapted within this framework of principles.

## PRINCIPLES OF EFFECTIVE UNDERGRADUATE ADMISSION TO UBC (APPROVED BY SENATE ON 9 MAY 2008)

ALIGNMENT WITH UBC'S GOALS:

Admission policies shall ensure that the institution "....attracts and retains the best undergraduate and graduate students from across BC, Canada and the world" (Trek 2010). Such students should be predisposed to take advantage of the opportunities to seek academic challenge, to do research, to develop leadership skills, to do community service, to foster global awareness, and to participate in sports and the fine and performing arts.

Corollary: Policies or practices that encourage the enrolment of top-quality students will be identified and reviewed.

Corollary: Where two or more principles are in conflict, the resolution will always aim to achieve the overall goals of the University.

#### **EVIDENCE-BASED POLICY REVIEW:**

Admission criteria will be based on knowledge of the strengths and weaknesses of educational systems world-wide and of student performance at UBC.

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Corollary: The University needs the ability to forecast changes in demand for programs so that policies can be adapted within this framework of principles.

## UBC

#### THE UNIVERSITY OF BRITISH COLUMBIA

#### **EXCELLENCE OF FIT:**

Evaluation criteria will aim to identify those applicants who are most likely to prosper at the University of British Columbia.

Corollary: General university admission criteria shall identify where possible common core academic requirements for admission to all undergraduate programs.

Corollary: Admission criteria for specific UBC programs shall be based on the framework of the general admission criteria.

Corollary: In addition to evidence of academic achievement, diverse admission criteria may be used (i.e., broader-based admission)

Corollary: The criteria by which applicants are evaluated for excellence of fit shall be applied in a fair and consistent manner.

#### FAIRNESS:

Applicants will not be disadvantaged by the structure (timing, sequencing, grading schemes) of the educational system followed that provides the basis of admission.

Corollary: Fair and equitable treatment of applicants does not require the application of identical policies and practices because to do so would be to ignore the different educational backgrounds and needs of prospective students.

Corollary: What is considered sufficient evidence of readiness to succeed may differ for different academic programs.

Corollary: Grading schemes will not be equated to the BC high school system unless data on student performance support such a practice.

Corollary: Applicants who are continuing UBC students wishing to change program will not be

#### **EXCELLENCE OF FIT:**

Evaluation criteria will aim to identify those applicants who are most likely to prosper at the University of British Columbia.

Corollary: General university admission criteria shall identify where possible common core academic requirements for admission to all undergraduate programs.

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Corollary: What is considered sufficient evidence of readiness to succeed may differ for different academic programs.

Corollary: Grading schemes will not be equated to the BC high school system unless data on student performance support such a practice.

Corollary: Applicants who are continuing UBC students wishing to change program will not be disadvantaged as long as they



#### THE UNIVERSITY OF BRITISH COLUMBIA

disadvantaged as long as they are in good academic standing in their current program.

are in good academic standing in their current program.

#### INTEGRITY:

Admission practices shall conform to policies.

#### TRANSPARENCY:

Admission requirements shall be clear and understandable to prospective students, counsellors, and others who influence student choice.

Corollary: The University will be open in its communication of admission policies and practices as long as doing so does not compromise the integrity of the admission decision.

#### TIMELINESS:

An offer will be made in time for the applicant to plan for the transition to UBC and for UBC to meet its enrolment targets.

Corollary: Applicants must know the terms of an offer from UBC in time to compare it to offers from other institutions and to make reasonable financial and relocation plans for the eventual transition to UBC.

Corollary: To attract excellent applicants,
UBC must render admission
decisions in a timely manner.
Timeliness is determined by
both the University's
enrolment management needs
and common practices and
expectations within the
applicant's home jurisdiction.
As most offers will be made
prior to the completion of the
academic year, final grades
are used primarily to confirm
offers of admission made on
interim grades.

Corollary: Some applicants may be able to present evidence of readiness

#### INTEGRITY:

Admission practices shall conform to policies.

#### TRANSPARENCY:

Admission requirements shall be clear and understandable to prospective students, counsellors, and others who influence student choice.

Corollary: The University will be openly direct in its communication of admission policies and practices.

#### TIMELINESS:

An offer will be made in time for the applicant to plan for the transition to UBC and for UBC to meet its enrolment targets.

Corollary: Applicants must know the terms of an offer from UBC in time to compare it to offers from other institutions and to make reasonable financial and relocation plans for the eventual transition to UBC.

Corollary: To attract excellent applicants, UBC-needs to make most offers before May 1<sup>st</sup>, which probably means that final grades cannot be considered from most educational jurisdictions and systems.

Corollary: Some applicants may be able to present evidence of readiness for success earlier than others so some offers of admission



#### THE UNIVERSITY OF BRITISH COLUMBIA

for success earlier than others so some offers of admission may be made much earlier than others using different sets of data. may be made much earlier than others using different sets of data.

#### COMPREHENSIVENESS:

The terms of an offer of admission will include space in an academic program, and space in student housing and financial support when applicable

Corollary: The application processes and decision timelines for both entry into academic programs and space in student housing must be linked because the allocation of student housing spaces must be part of a larger strategy for effective student recruitment.

Corollary: Offers of admission to an academic program and of merit-based financial assistance should be made at the same time based on similar sets of data because the allocation of scholarships must be part of a larger strategy for effective student recruitment.

#### COMMITMENT:

An offer of admission will not be revoked unless the applicant does not meet a minimum set of conditions that are conveyed with the offer.

Corollary: An applicant offered admission will in turn be expected to make a firm commitment to the university.

Corollary: The minimum conditions for retention of an offer of admission will be reviewed and modified regularly to ensure that as many students as possible succeed academically.

Corollary: All direct-entry programs will adhere to a minimum set of conditions for retention of offers of admission as identified on the letter of admission.

#### COMPREHENSIVENESS:

The terms of an offer of admission will include space in an academic program, and space in student housing and financial support when applicable.

Corollary: The application processes and decision timelines for both entry into academic programs and space in student housing must be linked because the allocation of student housing spaces must be part of a larger strategy for effective student recruitment.

Corollary: Offers of admission to an academic program and of merit-based financial assistance should be made at the same time based on similar sets of data because the allocation of scholarships must be part of a larger strategy for effective student recruitment.

#### COMMITMENT:

An offer of admission will not be revoked unless the applicant does not meet a minimum set of conditions that are conveyed with the offer.

Corollary: An applicant offered admission will in turn be expected to make a firm commitment to the university.

Corollary: The minimum conditions for retention of an offer of admission will be reviewed and modified regularly to ensure that as many students as possible succeed academically.

Corollary: All direct-entry programs shall adhere to a common minimum set of conditions for retention of offers of admission.



#### THE UNIVERSITY OF BRITISH COLUMBIA

#### **SENATE-APPROVED ENROLMENT TARGETS**

Enrolment will be limited to the number of students the University can provide with an excellent educational experience as determined by the Senate-approved enrolment targets.

Corollary: Student demand for admission relative to Senate-approved targets shall determine competitive admission standards.

#### **NON-DISPLACEMENT:**

International students shall not displace Canadian citizens and permanent residents for admission to the University.

Corollary: The University shall meet its provincial enrolment mandate for Canadian citizens and permanent residents of Canada.

Corollary: All provincially funded seats shall be occupied by Canadian citizens and permanent residents of Canada.



Office of the Senate

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

19 March 2014

To: Vancouver Senate

From: Senate Curriculum & Admissions Committees

Re: Master of Community and Regional Planning (approval)

The Senate Curriculum and Admissions Committees have reviewed the material forwarded to them by the Faculty of Graduate and Postdoctoral Studies (Faculty of Applied Science) and are pleased to recommend to Senate the following:

**Motion:** "That Senate approve the new Master of Community and Regional

Planning program and its associated revised course code and new

courses."

Respectfully submitted,

Dr. Peter Marshall, Chair, Senate Curriculum Committee

Dr. Robert Sparks, Chair, Senate Admissions Committee

### The University of British Columbia

School of Community and Regional Planning

## **Proposal**

## Master of Community and Regional Planning Degree Program

**MCRP** 

January 20, 2014 With Budget

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1.

# EXECUTIVE SUMMARY MASTER OF COMMUNITY AND REGIONAL PLANNING (MCRP) FACULTY OF APPLIED SCIENCE (APSC) FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES (G&PS) SCHOOL OF COMMUNITY AND REGIONAL PLANNING (SCARP) THE UNIVERSITY OF BRITISH COLUMBIA

#### Overview

Founded by Dr. H.P. Oberlander in 1951, the School of Community and Regional Planning (SCARP) is the oldest planning school in Canada. Its Vision is "Sustainability through the Democratization of Planning." In achieving that vision, SCARP's Mission is "to advance the transition to sustainability through excellence in integrated policy and planning research, professional education and community service."

SCARP's current master's program, the Master of Arts in Planning or Master of Science in Planning, is categorized by the University as a research degree, a designation consistent with the program's historic requirement for the completion of a research-based thesis as the "capstone" to the program. In recent years, SCARP's existing master's program has become increasingly more professionally oriented, and the majority of students choose the professional project option, first introduced in 2001, as their capstone. The School's Teaching and Learning Committee (TLC) has determined that the current M.A./M.Sc. in Planning program is not completely meeting the needs of students intending to become practicing professional planners. The proposed MCRP professional master's degree will better prepare students aspiring to planning careers with the knowledge, skills, and experience crucial to success in the world of professional planning.

#### Credential

Credential awarded is the **Master of Community and Regional Planning** (MCRP). The MCRP is a professional master's degree.

#### Location

The Vancouver Campus of UBC is the primary location for classroom education and administration.

#### **Faculty Offering Program**

The program is offered by the Faculty of Applied Science and the Faculty of Graduate and Postdoctoral Studies (G&PS).

#### **Program Start Date**

The program will begin in September 2015.

#### **Program Completion Time**

Anticipated time for completion is eighteen months to two years of full-time academic study.

#### **Objectives**

The MCRP is an innovative and flexible program that anticipates and responds to fast changing urban, regional, and global environments. It is intensive and professionally oriented, and students emerge as well-rounded, critical, and creative agents of change. The curriculum begins with a strong sequence of courses tailored to the evolving demands of the profession. Students additionally undertake concentrated study through a sequence of courses customized for their interests and professional aspirations. The program culminates in a studio that integrates theories and methods covered throughout the curriculum into a single team-based project with a real or simulated client or community group. Cumulative program requirements provide students with real world experience and prepare them for entry into a wide variety of planning jobs.

The MCRP addresses the School's educational philosophy and objectives:

- To give practical meaning to the concept of sustainable ecological social and economic development and to explore local and global paths toward achieving it by providing the knowledge and skills needed to ensure the viability of our communities and regions in a rapidly evolving world.
- To bring new understanding to the interdependencies among the many variables that affect the design and planning of the built environment, the development and use of "natural capital," and the creation of wealth generally.
- To advance society's capacity for strategic thought and action through identifying
  the institutional arrangements that can best assimilate our new knowledge and
  implement responsive policies and plans, and by developing new tools for
  governance to protect the public interest and enhance the "common-pool" assets
  upon which we all depend.
- To increase planners' effectiveness in working with diverse interests at the local level, in the communities and regions where people live and work.
- To maintain professional standards in all circumstances by developing technical competence and personal skills such as technical knowledge; analytic skills; communications ability; participatory leadership; sensitivity to others in complex organizational settings; sound professional judgment; ethical commitment, and a strong sense of responsibility.

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

The MCRP program supports the University's aim to foster global citizenship by attracting the best and brightest faculty and students from around the world. The School's strong procedural emphasis on integrated approaches to planning for substantive issues is reflected in the distinctive curriculum and specific requirements for the MCRP degree, as well as the research, professional practice, and service activities of the faculty, staff, and students. The School's goal, through the implementation of the MCRP, is to increase the effectiveness of its professional graduates in working with diverse interests at the local level, in the communities and regions where people live and

work, thereby supporting the University's goal of fostering community engagement. In keeping with the University's objective of becoming a leader in sustainability, SCARP envisages the MCRP program as a place of critical and thought-provoking enquiry about environmental and social sustainability, and as an incubator for the next generation of leaders in sustainable urbanism and city building.

#### **Delivery Methods**

The MCRP features a combination of both classroom and community-based studio courses, and theoretical and analytical skills courses. Students are required to complete an internship, usually in the summer term following the first year.

#### Linking Learning Outcomes and Curriculum Design, Internship

Employer and alumni surveys conducted recently by the School indicate a strong interest in a professional degree that combines theory with practice, emphasizes the analytical skills professional planners need, and that provides opportunities for practice-based learning. The MCRP curriculum design, especially in the required courses, is guided and informed by the accreditation and standards criteria of the U.S. and Canadian planning program accreditation boards while reflecting the faculty's expertise and assessment of the crucial knowledge and skills that all professional planners should possess.

Students, alumni, faculty, and employers confirmed that internships are valued primarily for the practical experience and networking opportunities they provide. In response to this input, and in keeping with trends within professional planning programs, the proposed MCRP curriculum includes a 3-credit internship as a mandatory and important component.

#### **Program Strengths**

The UBC School of Community and Regional Planning offers the most comprehensive graduate planning program in British Columbia, and is highly regarded nationally and internationally for the quality of its program. The MCRP will continue and further enhance the School's reputation for excellence by providing graduates with the knowledge, skills, and practical experience they need to take on the challenges of a rapidly changing and urbanizing world.

#### Related programs at UBC or other BC post-secondary institutions.

Only one other British Columbia university, Simon Fraser University, offers an accredited graduate planning degree, the Master of Resource Management (Planning).

#### Institutional Contact

**Penny Gurstein** (Professor and Director)

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#### 2. Program Rationale

#### 2.1. Background

The field of planning practice (encompassing urban, community and regional planning, and related sub-specializations) has long been recognized as a professional field in Canada, as elsewhere in the world. Canada's governing body for the planning profession, the Canadian Institute of Planners (CIP), was established in 1919, and its American counterpart, the American Institute of Certified Planners (AICP), traces its roots to 1917 and its predecessor, the American City Planning Institute. UBC's School of Community and Regional Planning (SCARP), the oldest planning school in Canada, has delivered a master's-level program since 1953. Not incidentally, SCARP is one of only two schools in Canada with a master's program fully accredited by both the Canadian and American professional planning governing bodies. The SCARP master's program has been through multiple rounds of re-accreditation (on a five year basis since 1973 for CIP, and since 1970 for AICP), and these two associations have perforce recognized it as a professional program that explicitly prepares students to enter the planning profession.

The School is highly regarded within the discipline of planning, and SCARP graduates work locally, provincially, nationally, and internationally as influential practitioners and leaders in sustainability planning. A recent survey of academic citations in planning ranked SCARP seventh—and first in Canada—out of 88 programs in North America in terms of average citations per faculty member, and tenth based on years in service out of the 88 programs in existence. <a href="http://tomsanchez.wordpress.com/2013/12/07/faculty-scholarly-productivity-and-reputation-in-planning-a-preliminary-citation-analysis/">http://tomsanchez.wordpress.com/2013/12/07/faculty-scholarly-productivity-and-reputation-in-planning-a-preliminary-citation-analysis/</a>

By establishing a new master's-level professional program at this time, SCARP is not only aligning itself with the long-established needs of the planning profession, but is also continuing its leadership role as an innovator in planning education.

SCARP's current master's program, leading to a Master of Arts in Planning or Master of Science in Planning, is categorized as a research degree, a designation consistent with the program's historic requirement for the completion of a research-based thesis as the "capstone" to the program. However, in a 2001 update, a non-thesis alternative, the professional project, was introduced as an option intended to simulate a planning project with either real or fictitious clients. As such, the professional project is expected to have a much smaller theoretical component than the thesis, is not based on primary research, and demonstrates an application of established knowledge and technique to a problem similar to what might be encountered in planning practice. The current professional project is further differentiated from the thesis by the number of credit units assigned for its completion (6 credits as compared to 12 credits for the thesis).

The professional project option caught on quickly among the students and grew to be the preferred option for the completion of the M.A./M.Sc. program. In recent years the

proportion of SCARP graduates choosing the professional project option has shown the following trend:

Fall 2007-Spring 2008:	72% project	28% thesis
Fall 2008-Spring 2009:	81% project	19% thesis
Fall 2009-Spring 2010:	69% project	31% thesis
Fall 2010-Spring 2011:	84% project	16% thesis
Fall 2011-Spring 2012:	84% project	16% thesis

In a sense, then, though approximately 20% of students choose the thesis option, a significant proportion of the current SCARP master's program has effectively ceased to be a research degree. Therefore, in developing the new MCRP professional degree, SCARP is building and expanding on a base that has already been established. The School is further enhancing the professional orientation of the master's-level teaching by integrating an internship/work experience requirement, a mentoring program, and a required studio to provide problem-based learning and team-oriented approaches to real or simulated planning issues. (See **Appendix 6** for a comparison chart of the existing and proposed degrees.) The School is currently reviewing the existing thesis program with the goal of restructuring it to meet the needs of students wishing to complete a thesis-based research degree.

#### 2.1.1 National and International Context of the Professional Master's Degree

According to a 2006 profile of Canadian master's degree programs within an international context, "probably the most significant global trend is the proliferation of professional programs...aimed at students who wish to enter a particular field directly after graduation or who want to enhance their professional credentials, and they are increasingly being designed with explicit input from industry and professional organizations." (Canadian Association of Graduate Studies [CAGS] 2006, i). The study found that, in European countries such as Austria and France, the number of professional master's degrees is growing rapidly, and they are carefully differentiated from academic master's degrees; only through the latter can a student enter a doctoral program. In Australia, professionally oriented (or "coursework master's degrees") represented nearly 95% of all master's enrolments by 2004 with a significant number of the enrollees coming from other countries.

In keeping with this global trend, Canadian professional master's programs (primarily non-thesis, and where courses and internships play a central role) are flourishing: the increase in the number of professional graduate degrees is one of the most notable changes within the past two decades (CAGS 2006). In both Canada and the United States, professional master's degrees are the largest area of growth within graduate education (Leckie 2011). From 1994 to 2003, 70% of master's students in Canadian universities were in professionally oriented degree programs, the majority in business, management, and marketing degrees followed by education, engineering, health and clinical sciences, and public administration (CAGS 2006). While the CAGS study did not

specifically discuss planning programs, as Section 2.4.3 below shows, the number of professional planning degrees offered at Canadian universities is significant and growing.

SCARP's development of a professional master's degree program is, therefore, in keeping with national and international developments in graduate education. However, there are some concomitant implications and concerns related to increased professionalization that are noted and addressed.

#### Academic quality and degree recognition

In a 2003 study on trends and developments within European higher education, the United Nations Educational, Scientific and Cultural Organization (UNESCO) points to the competition between the academic and market (or professional) paradigms, and supports the assertion of traditional academic values to ensure that professional graduate degree programs remain strong academically while preparing graduates for the job market. The 2006 CAGS study identified the recognition and credibility of professionally oriented master's programs as a challenge. One reason is that, while thesis students are evaluated through a peer-review process, non-thesis students are usually not evaluated by external entities. The report recommends that this situation can be corrected by requiring a major research report, or some other significant output, that involves at least one external evaluator.

#### How SCARP is addressing these issues:

Each MCRP student is required to do a capstone project, for 3 or 6 credits, generally as an individual professional report, although there is an option for a group capstone if faculty members are in agreement. All projects are reviewed by an external examiner with expertise in the subject matter of the project. The School's Teaching, Learning and Curriculum Committee oversees group projects and determines criteria for the assessment of individual contribution.

The academic rigor of the MCRP program is equivalent to that of the current research master's program, and graduates emerge well-grounded in the knowledge, skills, and values of the profession, in keeping with Planning Accreditation Board (PAB) and CIP performance criteria and SCARP's high academic standards. It is SCARP's intention that the MCRP be fully accredited by CIP through the Professional Standards Board; faculty will make a decision about whether or not to continue accreditation through the American PAB prior to the beginning of the MCRP program. Students will emerge from the MCRP program with an accredited degree that will make them eligible for eventual full membership in the Canadian Institute of Planners as Registered Professional Planners.

The School's pedagogical excellence has been recognized by the Peter Larkin Award, granted to a UBC graduate program for contributions to student development. Specific

efforts to ensure the School's academic relevance in ways appropriate to a professional planning program include the Planners for Tomorrow conference and the continuing dialogues with practicing planners through the Plan Talk lecture series since its inception in 2001, and through faculty and student involvement in the Planning Institute of British Columbia, notably its Education Committee.

#### Student funding

Student funding is a crucial issue at the master's level. The CAGS report states emphatically "funding support is...a determinant of the evolution of master's degrees in Canada, both at student and program levels (2006)." However, students in professional programs may not have access to internal or external merit-based research scholarships open to those in traditional academic programs. Lack of funding can limit student enrolments, especially those of international students who, without financial support, may not be able to afford the higher tuition fees associated both with their non-domestic status and the higher tuition costs of professional programs. There are also equity concerns: higher tuition costs for professional programs could become a barrier to lower income students, both domestic and international, being able to access graduate-level study.

#### How SCARP is addressing these issues:

SCARP uses a portion of the proceeds from the MCRP tuition to fund in-house fellowships, bursaries, and other financial awards for qualified student applicants. The MCRP Program Manager works with the development office of the Faculty of Applied Science to identify and solicit other possible sources of student funding, such as alumnisupported scholarships and donations from private companies and/or professional organizations.

The School awards several small scholarships in the \$500-\$1500 range annually, and other scholarship opportunities are available to students from public, corporate and private sources administered through the UBC Student Awards and Financial Aid Office. In most years, project grants to the Centre for Human Settlements provide thesis scholarships or travel awards to several students. Other student support has included the annual provincial (and now UBC) "work-learn" program (which provides funding for several students, including international students, to work on research or project management tasks for up to 10 hours per week at about \$12 per hour) and varying levels of grant-support to individual students as research assistants to professors. Research assistantships are also available when faculty members are able to support them from their own funds. Both Canadian and international students are eligible to apply for MITACS internships that pay a minimum of \$10,000 for a four-month internship. Over the past five years, 20 SCARP students have been awarded MITACS internships, and the School anticipates that the numbers will increase as a result of the new MCRP internship requirement.

Recently, SCARP received a generous offer from the J. Armand Bombardier company to establish an endowment for Sustainable Transportation Fellowships. Three fellowships of \$5,000 each have been endowed by Bombardier for graduate students who are focused on research in any one of three areas: equity and community engagement, population and public health, and environmental and sustainability issues associated with transportation. Each awardee is eligible for an additional \$800 in travel funding for research related activities. Recommendations are made by the School of Community and Regional Planning in consultation with the UBC Faculty of Graduate and Postdoctoral Studies. (First fellowships will be available in the 2014W Session.)

#### 2.2 Vision and Mission Statements and Program Objectives

SCARP's Vision is "Sustainability through the Democratization of Planning." In achieving that vision, SCARP's Mission is "to advance the transition to sustainability through excellence in integrated policy and planning research, professional education and community service."

SCARP's new MCRP is an innovative and flexible program that anticipates and responds to fast changing urban, regional, and global environments. It is intensive and professionally oriented, and students emerge as well-rounded, critical, and creative agents of change. The curriculum begins with a strong sequence of courses tailored to the evolving demands of the profession. Students additionally undertake concentrated study through a sequence of courses customized for their interests and professional aspirations. Students also have the option of choosing one of two pre-determined concentrations in Indigenous Community Planning or Urban Design (see **Appendix 7** for descriptions of the structure and required courses for these concentrations). The program culminates in a studio that integrates theories and methods covered throughout the curriculum into a single team-based project with a real or simulated client or community group. Cumulative program requirements provide students with real world experience and prepare them for entry into a wide variety of planning jobs.

The objective of the MCRP program is to further the Vision and Mission of the School by providing students, through cutting-edge content and innovative pedagogy, with the essential theory, skills, methods, and critical thinking and analytical tools they need to address the complex social and environmental issues of a rapidly urbanizing world. By doing so, the MCRP addresses all of the five critical challenges that shape the School's educational philosophy and objectives:

 To give practical meaning to the concept of ecologically sustainable social and economic development and to explore local and global paths toward achieving it by providing the knowledge and skills required to ensure the viability of our communities and regions in a rapidly evolving world.

- To bring new understanding to the interdependencies among the many variables
  that affect the design and planning of the built environment, the development and
  use of "natural capital," and the creation of wealth generally. To meet this
  challenge, planners must acquire a sense of confident familiarity with diverse
  forms and sources of knowledge and develop the facility to use that knowledge in
  integrated development planning.
- To advance society's capacity for strategic thought and action through identifying the institutional arrangements that can best assimilate our new knowledge and implement responsive policies and plans, and by developing new tools for governance to protect the public interest and enhance the "common-pool" assets upon which we all depend. Answering such questions requires planners skilled at identifying feasible options, structuring decision processes, and identifying the inevitable trade-offs and long-term consequences inherent in all significant public policy choices.
- To increase planners' effectiveness in working with diverse interests at the local level, in the communities and regions where people live and work.
- To maintain professional standards in all circumstances by developing technical competence and personal skills such as technical knowledge; analytic skills; communications ability; participatory leadership; sensitivity to others in complex organizational settings; sound professional judgment; ethical commitment, and a strong sense of responsibility.

The MCRP program is further guided and informed by the accreditation and standards criteria of the Planning Accreditation Board (PAB), revised in March 2012, and the CIP's accrediting body, the Professional Standards Board (PSB) established in 2012. The PAB and PSB criteria are performance standards, not course descriptions, and the MCRP curriculum, especially in the required courses, reflects the faculty's expertise, high academic standards, and unique character of SCARP while ensuring that all accreditation criteria are addressed within the required curriculum. The School intends for the MCRP to be fully accredited in Canada, and will make a decision about maintaining PAB accreditation prior to the beginning of the new program.

#### 2.3 Contribution to UBC Mandate and Strategic Plan

The MCRP program addresses many of the goals outlined in *Place and Promise: The UBC Plan*. These include:

#### Student Learning

Enhance the quality and impact of teaching for all students.

The MCRP program offers an innovative curriculum that draws upon the expertise of SCARP faculty as well as practicing professionals, many of whom are adjunct professors. The program features a challenging curriculum that grounds students in the history and theory of the planning profession while providing opportunities to synthesize theory and practice in real-world settings. The MCRP program supports the University's aim to foster global citizenship by attracting the best and brightest applicants from around the world. The strong procedural emphasis on integrated approaches to planning for substantive issues is reflected in the distinctive curriculum and specific requirements for the MCRP degree, as well as the research, professional practice, and service activities of the faculty, staff, and students. SCARP's experience with these endeavours has in recent years led to an emerging focus on learning through the integration of the teaching, research, professional practice, and service activities of the School.

#### **Community Engagement**

- Dedicate University resources to public understanding of societal issues and stimulate action for positive change.
- Be a leader in fostering student, faculty, staff, and alumni engagement within the wider community.

SCARP faculty, staff, and students are highly active in many different arenas and processes, both on and off-campus, from the local to the global level, including academic, governmental, business, and civil society organizations. SCARP offers an impressive lineage of courses grounded in community service learning and community-based research. For example, the Indigenous Community Planning specialization aims to train students to work with First Nations communities on critical planning issues. The MCRP builds on this legacy by requiring students to complete internships and studio courses that not only provide them with practical experience, but also serve community needs by addressing complex issues of immediate concern to community members and organizations. The School's goal, through the implementation of the MCRP, is to increase the effectiveness of its professional graduates in working with diverse interests at local levels, in the communities and regions where people live and work. It is at this scale that planning most directly affects the conditions of everyday life, whether through urban design, community economic development, or natural resource enhancement.

#### Intercultural Understanding

Increase awareness and experience of the benefits of intercultural learning.

SCARP has historically attracted an international and ethnically diverse student population. The MCRP is a magnet for students from all over the world. The Megapolitan exchange program with universities in Spain, Mexico, and Ireland brings students to SCARP while field schools in the Philippines and Costa Rica afford SCARP students the

experience of learning within a different cultural environment. SCARP is currently exploring experiential learning opportunities in Indonesia, China, and Chile. Past studio courses have been conducted in Israel and Vietnam. The Indigenous Community Planning concentration builds intercultural understanding with First Nations peoples, and requires all students within the concentration to work in an Aboriginal community on planning-related issues.

#### **Outstanding Work environment**

Be the place of choice for outstanding faculty and staff.

The MCRP program attracts the very best faculty and staff. SCARP's full-time, emeritus, and adjunct faculty members have international reputations across the range of subfields in the profession (see **Appendix 2**).

#### Sustainability

 Make UBC a living laboratory in environmental sustainability by combining its sustainability leadership in teaching, research, and operations.

Central to the UBC mission is the advancement of a civil and sustainable society. SCARP's explicit identification with 'planning for sustainability', where sustainability is defined in terms of its interrelated environmental, economic, and social dimensions, is a uniquely distinguishing feature of the program. It has placed the School among the lead programs and operating units at UBC concerned with sustainability issues, both domestic and international. Like the University itself, SCARP's core mission is conceptualized through a sustainability lens. SCARP envisages the MCRP program as a place of critical and thought-provoking enquiry about environmental and social sustainability, and as an incubator for the next generation of leaders in sustainable urbanism and city building.

#### 2.4. Relationship to Established Programs

#### 2.4.1. The University of British Columbia

SCARP has long enjoyed close programmatic and research relationships with a variety of other units at UBC. These include:

- The Institute for Resources, Environment and Sustainability (IRES)
- The Institute for Gender, Race, Sexuality and Social Justice
- The Institute for Asian Research (IAR)
- The School of Architecture and Landscape Architecture (SALA)

Transportation and Infrastructure Planning, Department of Civil Engineering

SCARP's Centre for Human Settlements is the focus for major collaborative research projects that involve faculty and students from a variety of disciplines and departments interested in human settlements and international development planning. These intrainstitutional linkages provide SCARP students and faculty with continuous opportunity for intellectual cross-fertilization as well as exposure to the process of interdisciplinary collaboration.

SCARP faculty members are frequent participants in University committees and task forces on collaborative projects with other units, including:

- The University Senate
- UBC Behavioural Research Ethics Board
- UBC Climate Action Advisory Committee
- UBC Climate Risk Assessment Project task force
- UBC Committee on Interdisciplinarity
- UBC Killam Committee
- UBC-UN Habitat Exchange Steering Committee
- UBC Campus Planning Committee
- Vancouver Campus Plan Technical Advisory Committee
- UBC Campus Planning Open Space Committee
- UBC Campus 50 Planning Gateways Advisory Committee
- UBC Community Learning Initiative Planning, Implementation & Evaluation Committee
- UBC-Community Learning Initiative Steering Committee
- Institute of Asian Research Council
- Trudeau Fellowship Adjudication Committee
- CFIS Promotion and Tenure Committee
- St. John's College, Senior Fellow

SCARP faculty have either led or contributed to several major interdepartmental interdisciplinary research projects including a SSHRC Community-University Research Alliance (Climate Justice), SSHRC Major Collaborative Research Initiative (MCRI) (Asia Pacific Dispute Resolution), SSHRC MCRI (the CHILD project), SSHRC Initiative on the New Economy (the EMERGENCE project). In addition, SCARP faculty are regular contributors to several other graduate and undergraduate teaching programs on campus, beyond those in which they are jointly appointed, that deal with planning and sustainability issues (e.g., courses in Conservation Biology, Occupational and Environmental Hygiene, Sociology). Finally, SCARP graduate courses provide a major service role to the University community and many are well-attended by students in other programs including Resource Management and Environmental Studies (RMES), Architecture and Landscape Architecture, Engineering, Forestry, Biology, Economics, Geography, Journalism, and Asian Studies.

#### 2.4.2. Other British Columbia Universities

Only one other British Columbia university, Simon Fraser University, offers an accredited master's degree in planning.

School of Resource and Environmental Management
 School of Fundamental

Faculty of Environment

Degree: Master of Resource Management--MRM (Planning)

Tuition: \$4,985/yr. (domestic and international)

The SFU program is narrower in focus than the SCARP program, and emphasizes coursework in ecological systems, environmental management, resource planning, and conservation, among others. The SFU MRM is not equivalent to, or in direct competition with the SCARP MCRP program.

#### 2.4.3. Other Canadian Institutions

A number of Canadian universities with accredited graduate planning programs offer professionally oriented master's degrees. A selective list follows. (**Note**: not all of these programs meet UBC's definition of a professional degree since they continue to offer a thesis option.)

Removed for purposes of Curriculum; may be requested.

While comparing programs across universities is problematic, the Canadian programs that appear to be most similar to SCARP's are:

- Dalhousie, a twenty-month program with a work term in the summer (third) semester. The program consists of 60 total credit hours, 45 credit hours of required course work, and 15 credit hours of elective course work. The work term is a non-credit academic requirement.
- Ryerson, an advanced study program centred on a core sequence of design studios, core courses on issues of culture and nature in planning, electives, and a major research paper or project. The program offers two courses of study: a twelvemonth accelerated program for students with a background in planning or design that includes six required courses, and two electives plus a paper or project; and a twoyear program for students with no planning background that includes thirteen required courses, three electives, an internship, and a paper or project; and
- Toronto, whose program closely resembles the existing SCARP research master's
  program, offers a fully accredited master's degree to suit the needs of students that
  are intent on working as planners or pursuing doctoral studies in planning or related
  fields. The structure of the curriculum consists of a required set of core courses and
  a broad range of elective courses covering five areas of specializations: urban

planning and development; social planning and policy; economic planning and policy; environmental planning; and urban design. Students have the option of a thesis or a shorter paper as their capstone.

#### 2.4.4 American Universities

Tuition at American public universities offering accredited professional planning degrees is typically substantially higher than comparable Canadian institutions, though American universities are often able to offer higher levels of student support, including tuition/fee waivers, bursaries, teaching and research assistantships, scholarships, and grants. Of the programs listed in the chart below, five (marked with an asterisk) are ranked in the top ten of urban planning schools by *Planetizen*, a public-interest information exchange provided by Urban Insight for the urban planning, design, and development community. (**Note**: American professional planning associations, such as the AICP, the Association of Collegiate Schools of Planning, the American Planning Association, and the PAB do not rank schools and do not formally recognize this ranking or the criteria underlying it.) Tuition at two private universities, the University of Southern California (USC), ranked seventh, and the Massachusetts Institute of Technology (MIT), ranked first, are included for comparison. (The program at the University of Wisconsin, Madison is comparable in size and scope to SCARP and has an innovative approach to individually tailored concentrations that has served as a model in the development of the MCRP.)

Removed for purposes of Curriculum; may be requested.

#### 2.5. Demand for Program

#### 2.5.1. Enrolment Predictions and Capacity

Over the last ten years, the SCARP master's program has received per annum an average of 177 applications (high of 218, low of 153) with an average of 30 students enrolling in the program (high of 36, low of 26). Each year between 25% and 35% of the total number of applicants are admitted, with between 15% and 20% of the total number of applicants actually enrolling per annum. Even if applications decreased owing to the higher tuition for the MCRP, the School anticipates it can still make its initial goal of approximately 30 enrollees by increasing the percentage of applicants admitted each year. This is in keeping with other masters programs in the Faculty of Applied Science that admit on average 37% (high of 62%, low of 19%) of applicants with approximately 25% (high of 46%, low of 12%) on average enrolling.

From 2008-2012, international student applications to SCARP were 34% of the total. Of those applicants who were offered admission and accepted, international students constituted an average of 24% of the total number of students in a given year with American students the most numerous. While the increased tuition may be a deterrent to some international students, SCARP's program continues to offer a high-quality planning education at a very competitive cost, especially when compared to American planning programs.

#### 2.5.2 Relationship to Existing M.A./M.Sc. in Planning Program

The current thesis-optional master's program will accept its final cohort of students in September 2014. The School is currently reviewing the existing program with the goal of restructuring it to meet the needs of students wishing to complete a thesis-based research degree.

#### 2.5.3 Employer Preferences

In April and May 2012, SCARP alumni were asked to complete a survey designed to provide insight into the extent to which the master's program prepares graduates for the professional world. Survey respondents who answered yes to the question "Are you currently, or have you in the past, been in the position in which you hire planners and/or recent planning graduates?" were asked to describe what they generally look for when they hire someone. Responses to this question were detailed and thoughtful.

Employers especially stressed the crucial importance of effective communication skills (writing and speaking), analytical abilities, adaptability and the capacity to learn quickly, and problem solving and research skills, as well as substantive knowledge of planning policy and legislation, experience with public engagement methods and facilitation and negotiation approaches, and leadership skills. The MCRP includes coursework and

practice-based experience to ensure that graduates have all of these important skills and attributes when they enter professional practice.

#### 2.5.4. Potential Sectors of Employment for Graduates

The graduate survey report also asked graduates to describe their current employer. Sixty per cent of currently employed respondents selected an answer in the public sector. Sixteen percent selected "private sector", 13% chose "self-employed", and 7% selected "non-profit". These figures reflect both the historic focus of employment in the planning profession in municipal and other public sector agencies, and emergent new trends for professional employment in the private and non-profit sectors.

The MCRP degree program better prepares graduates for professional practice not only by emphasizing the kinds of knowledge and skills necessary to obtain a job in today's market, but also by providing the kind of forward-looking education that graduates need to become the future leaders and innovators of the planning profession.

#### 3. Program Description and Specifications

#### 3.1. Admission Requirements

All applicants must meet the admission requirements of Graduate and Postdoctoral Studies.

In addition to meeting the University's academic standards for admission, SCARP requires that students submit a 500-word statement outlining their specific interests as well as providing information on their professional experience and community involvement. Through these statements, the School can obtain more information on students' reasons for applying to SCARP, their perception of planning as a profession, and an indication of their written communication skills. These statements are used together with letters of reference to make an overall assessment of a student's potential, to balance the interests in the entering class, and to select each student's program advisor. The SCARP Admissions Committee oversees the admissions process to the School.

**Note**: because there are very few undergraduate planning programs in Canada and the U.S., the majority of SCARP applicants have bachelor's degrees in other disciplines. The diversity of undergraduate specializations, rather than being an impediment to graduate study in planning, is compatible with and reflects the interdisciplinary nature of the field itself. For this reason, students' interests, planning-related experience, and reasons for pursuing graduate studies in planning are given more weight than their undergraduate majors.

#### 3.2. Curriculum

The curriculum of the MCRP program encompasses the knowledge essential to any practicing planner, and reflects both the expertise and areas of practice of the faculty, and the performance criteria specified by the Planning Accreditation Board and the Professional Standards Board. The MCRP curriculum synthesizes planning theory and practice, provides a foundation in the analytical methods and tools used by planners, and gives students opportunities to pursue their own particular areas of interest and to apply what they have learned in real-world settings.

#### 3.2.1. Learning Outcomes

Students who complete the professional master's program emerge as:

- Reflective and ethical practitioners who are cognizant of the global context in which they work.
- Critical thinkers who can synthesize theory and practice in their daily professional lives; who understand the relationships between past, present, and future in planning domains; and who recognise the potential for methods of design, analysis, and intervention to influence the future.
- Empathetic practitioners who are knowledgeable about and sensitive to differences of culture, language, gender, power, and class in working with diverse communities.
- Skilled users of cutting-edge technology and data analysis to build and implement effective plans and make convincing arguments for policy directions.
- Imaginative, flexible, and creative thinkers who can respond to sudden changes in their work environment, both positive and negative.
- Generous and collegial co-workers in a team-oriented workplace.
- Highly effective communicators (graphic, written, and verbal).
- Professionals prepared to take on a leadership role in building healthier, more sustainable communities.

#### 3.2.2. Enhanced Professional Characteristics

#### Internships

SCARP has always encouraged internships, but has not previously required them. A recent series of interviews conducted by SCARP students with other students, alumni, faculty, and employers confirmed that internships are valued primarily for the practical

experience and networking opportunities they provide. Interviewees recommended that SCARP can benefit from leveraging the School's network of alumni and professionals to better connect students to internship opportunities, thereby reducing the need for students to obtain internships on their own. Moreover, the respondents recommended that support of SCARP faculty be formalized and continued throughout the entire internship process rather than the preliminary stages alone. The strong emphasis respondents placed on practical experience suggests that the curriculum could be strengthened through increasing the variety of opportunities available to students for gaining this experience and/or supporting those students who attempt to seek it out.

In response to this input, and in keeping with trends within professional planning programs, the proposed MCRP curriculum includes a 3-credit internship as a mandatory and important component. The internship is intended as more than mere work experience:

We hold academic expectations for internships. We want assurance that the student will actually work on substantive planning issues, not become the office "gofer." We also intend that the internship experience develop in our students the ability to reflectively link immediate problems to general and theoretic knowledge (Brooks et al. 2002, 191).

Further, the internship is designed to give student planners the opportunity to develop the skills of reflective practice through a series of steps that begin before and continue after the internship is completed.

[The first of these steps is] the acquisition of a working knowledge of relevant substantive, process, and analytic information and skills often gained primarily through coursework. The planner (or student intern in this case) then applies that knowledge in internship or practice situations. Successful reflective practice occurs when a planner is able to recognize specific combinations of situations, effects, and likely outcomes to adjust his or her actions to achieve desired results. In other words, the planner responds to a dynamic situation in real time (Brooks et al. 2002, 190-191).

Faculty involvement is crucial to the success of an internship program. In the first year of coursework, students learn the foundational knowledge and skills of their profession. Individual faculty work with a student to develop questions to consider during the internship, and through the process of journaling, interns can reflect on those questions and their experiences, both personal and professional. Frequent faculty contact with the student during the internship (for monitoring and feedback) ensures that the student's learning goals are being met, and sharing of the student's experience with faculty and fellow students after the internship (through a seminar or workshop) leads to important peer learning and identifies areas of practice for further development and investigation (Brooks et al. 2002).

In instituting the internship as a crucial and mandatory part of the professional master's program, the School is further developing its infrastructure for establishing and building relationships with local, regional, provincial, national, and international governments and agencies, non-profit organizations, private firms, and other potential internship venues, and puts particular emphasis on identifying opportunities that allow students to be paid during their internship experience. (The previously mentioned MITACS internship program is a potential source of paid positions.) The MCRP Program Manager coordinates the internship program by helping to identify opportunities and establishing and nurturing relationships, by assisting in matching students to appropriate positions, and by working with faculty to provide on-going monitoring and support for students during their internships.

Examples of internship sponsors include:

- City of Vancouver, and other BC municipalities
- The Islands Trust
- HB Lanarc (a private planning consulting firm)
- The BC Provincial Housing Policy Branch
- Metro Vancouver and neighbouring regional districts
- Translink
- Various U.S. and international internship opportunities

#### **Studios**

A 6-credit studio course is required for all MCRP students in their second year.

Participation in at least one studio-based learning experience is a feature of most North American accredited programs. Studios have long been a feature of planning curricula, though enthusiasm for them has historically waxed and waned. Since the 1990s, however, a resurgence of interest in the studio as an essential pedagogical tool has led to a re-examination within planning of how to define a studio, how to use the studio to explore new kinds of knowledge including and beyond plan-making, and how to assess learning outcomes (Németh and Long 2012; Long 2012).

The understanding of studio pedagogy as an educational approach shapes its delivery, and informs and guides the "nuts and bolts" of studio design, instructional format, and educational outcomes (Long 2012). The conventional studio model usually takes the form of a workshop course where students develop solutions to a planning problem, under the guidance of the instructor, that are then defended in a classroom or real setting. Another model takes the class into the community to work with a client group to address real-world problems. Studio teaching can help prepare students for the challenges of the future by emphasizing the "seven Cs": creativity; criticality;

collaboration; citizenship; contemplation (reflection); confidence; and courage (Higgins, Aitken-Rose, and Dixon 2009).

SCARP defines a studio as an application of integrated theories and methods covered in the required courses and electives in a single team-based, real-world, problem-based project with a real or simulated client or community group. The MCRP features both classroom-based and community-based studios: the urban design studio is an example of the conventional studio model, and field studios in the Philippines, Costa Rica, and Vancouver (the Vancouver Laboratory, in conjunction with a local architectural firm), take students into communities to work on real-world projects. In previous years, studio courses have been conducted in China, Israel, and Vietnam, and the School is currently pursuing the opportunity for a studio course in Indonesia. The Indigenous Community Planning concentration also requires students to complete a practicum working in Aboriginal communities on planning projects.

#### Mentorship program

Each incoming MCRP student is paired with a mentor throughout the student's program. The volunteer mentors are drawn from a qualified pool of practicing professional planners who are registered through the Planning Institute of British Columbia (PIBC) and the CIP. Many of the mentors are SCARP alumni. Students are required to become student members of PIBC. This not only allows them to attend PIBC events and meet practitioners, but also starts them on the path to professional accreditation as practicing planners. In addition, PIBC members can receive professional development credit for their efforts as mentors to student members, an important incentive to their participation in SCARP's mentorship program. Students and their mentors are largely left to organize their relationship as they see fit, though the MCRP Program Manager and faculty advisors can assist if any complications arise. SCARP's mentorship program is similar to, and inspired by those of the UBC School of Architecture and Landscape Architecture (SALA), and Engineering.

#### 3.3. Program Requirements

The total credit requirement is 48 credits which includes courses specifically designed to incorporate accreditation performance criteria along with what faculty members collectively agree every planner needs to know. Each student is required to complete a concentration comprising a set of at least 12 credits that can be tailored to the student's interests in careful consultation with an advisor, or alternatively may consist of a established series of courses (of up to 15 credits) for a pre-defined concentration in Urban Design or Indigenous Community Planning. The professional field of planning has over recent decades seen a proliferation of sub-specialties, making it difficult for a small teaching program to keep pace with these developments. In response, smaller programs such as SCARP's have developed the strategy of allowing individually tailored concentrations. Along with a 3/6-credit capstone (generally an individual professional

report, but with an option for a group capstone), the program features a required 6-credit studio and 3-credit internship. Electives make up the remaining 6 credits.

#### 3.3.1. Delivery and Required Courses

	Credits	Instruction
_AN 508: Foundations of Planning Theory and History 3		Full Professor
PLAN 509: Urbanism as a Global Way of Life	2	Full/Associate Professor
PLAN 510: Environment and Sustainability Concepts for Planning Practice	2	Assistant Professor
PLAN 521: Quantitative Skills for Planners	3	Full Professor
PLAN 522: Qualitative Data Collection and Analysis	2	Full/Associate Professor
PLAN 523: The Profession of Planning	2	Assistant Professor
PLAN 524: Legal Concepts for Professional Planning	2	Adjunct
PLAN 525: Planning Practice Methods	2	Full Professor
PLAN 526: Selected Topics in Experiential Learning: The Planning Studio	6	SCARP Faculty/Adjunct
PLAN 527: Internship	3	SCARP Faculty
PLAN 528: Capstone Professional Report	3/6**	SCARP Faculty
Concentration*	12	SCARP Faculty
Electives*	3 or 6	SCARP Faculty
TOTAL REQUIRED COURSE CREDITS	48	

<sup>\*</sup>These courses will have a number of content options available in any given term

#### 3.3.2. Outline of Program for a Typical Student

The MCRP program's emphasis on a set sequence of courses means that each student cohort will follow a consistent timetable.

<sup>\*\*</sup>The 6-credit capstone will primarily apply to students in the Indigenous Community Planning (ICP) concentration who will combine it with the 6-credit studio to form their 12-credit required community-based practicum.

MCRP CURRICULUM		
Year One: Winter Session Term One		
(September-December)		
Cr	edits	Format
PLAN 508: Foundations of Planning Theory and History	3	12 weeks
PLAN 521: Quantitative Skills for Planners	3	8 weeks
PLAN 522: Qualitative Data Collection and Analysis	2	8 weeks
PLAN 523: The Profession of Planning	2	8 weeks
Winter Session Term Two (January-April)		
PLAN 509: Urbanism as a Global Way of Life	2	8 weeks
PLAN 524: Legal Concepts for Professional Planning	2	8 weeks
PLAN 525: Planning Practice Methods	2	12 weeks
Concentration	3	12 weeks
Elective	3	12 weeks
Summer Term: Internship		
PLAN 527: Internship	3	12 weeks
Year Two: Winter Session Term One		
(September-December)		
PLAN 510: Environment and Sustainability Concepts for Planning Practice	2	12 weeks
PLAN 526: Selected Topics in Experiential Learning: The Planning Studio	6	12 or 24 weeks
Concentration	3	12 weeks
Winter Session Term Two (January-April)		
Elective	3	12 weeks
Concentration	3	12 weeks
Concentration	3	12 weeks
PLAN 528: Capstone Professional Report	3/6	12 weeks

#### 3.4 Supervision

Upon admission to the MCRP program, each student is assigned an advisor from within the SCARP faculty based upon the interests, goals, and objectives of the student. Before entering the program, the Program Manager works with each incoming student to determine an appropriate advisor. The advisor's role is to review the student's research interests and career objectives and advise on course selection throughout the student's program. The advisor must approve all course registrations. Program advisors conduct two formal reviews during the Winter Session at the start of each term. Students may, however, consult with their advisors at any time.

#### 3.5. Student Evaluation

The School is well aware that assessment of individual contribution in studio and other team-based courses is a concern to the University. SCARP has decades of experience setting standards for these types of evaluations. In regard to studio courses, work is both individually tutored, and tutored in problem-solving teams. Final grades are assessed based on clear criteria and expectations of students are formalized through individual course syllabi.

Internships are evaluated in relation to learning objectives identified by the student and faculty advisor prior to the internship's beginning; through faculty consultation with the sponsoring organization; and through a required report and presentation following the completion of the internship. Each MCRP student is required to do a capstone project, for three or six credits, generally as an individual professional report, but there is an option for a group capstone if faculty members are amenable. The School's Teaching and Learning Committee oversees group projects and determines criteria for the assessment of individual contributions.

#### 3.6. Policies on Program Management and Assessment

In parallel to internal reviews used to evaluate professional degrees conducted according to the SCARP, Faculty of Applied Science, Planning Accreditation Board, Professional Standards Board, and UBC governance guidelines, the MCRP program is evaluated and developed based on the recommendations of an Advisory Council. The Council consists of experienced and knowledgeable individuals from outside of the School who are SCARP alumni, employers of SCARP graduates, and partners in SCARP research and capacity building projects, academics, and others with expertise pertinent to SCARP. In addition, SCARP has a School Management Committee (SMC) (composed of faculty, student representatives from the masters and PhD programs, and staff) that meets monthly to address immediate management issues, conduct program assessment, and discuss development issues on a prioritized basis, usually drawing on the results of a task force or committee for recommendations. Other committees and working groups have been created to facilitate improvements in the School: the Strategic Planning Working Group; Teaching, Learning and Curriculum Committee; and the Professional Development Committee. The chairs of these programs, committees and working groups report monthly at the SMC meetings.

#### 4. Calendar Statement - Program

Degree Offered: MCRP

#### Members - Community and Regional Planning

#### **Professors**

- **S. E. Chang**, B.S.E. (Prin.), M.S., Ph.D. (C'nell.); joint appointment with Institute for Resources, Environment and Sustainability; Canada Research Chair in Disaster Management and Urban Sustainability
- **L. D. Frank**, B.L.A (Arizona), M.Sc.E., Ph.D. (Wash.); joint appointment with School of Population and Public Health
- P. C. Gurstein, B.A. (York), B.Arch. (Br.Col.), M. Arch., Ph.D. (Calif., Berkeley)
- T. Hutton, B.A. (Br.Col.), Ph.D. (Oxf.)
- **T. McDaniels**, B.A. (Minn.), M.A. (S.Fraser), Ph.D. (Carnegie Mellon)
- L. Sandercock, B.A. (Adel.), Ph.D. (Aust.), M.F.A. (Calif., L.A.)Professors

#### **Professors Emeriti**

P. D. Boothroyd, B.A. (Tor.), M.A. (Alta.)

**A. H. J. Dorcey**, M.A. (Aberd.), M.S. (Wis.); joint appointment with Institute for Resources, Environment and Sustainability

W. E. Rees, B.Sc., Ph.D. (Tor.), FRSC

#### **Associate Professors**

**L. C. Angeles**, B.A. (Philippines), Dip.Women and Development Planning (Nott.), M.A. (Philippines), Ph.D. (Qu.); joint appointment with Institute for Gender, Race, Sexuality, & Social Justice (Arts)

M. Leaf, B.Sc. (M.I.T.), M.Arch., M.C.P., Ph.D. (Calif., Berkeley)

#### **Assistant Professors**

M. Senbel, B.Arch. (Oregon), M.Arch. (McG.), M.Sc.P., Ph.D. (Br.Col.)

M. Stevens, B.A., M.C.R.P. (Oregon), Ph.D. (N.Carolina)

J. Honey-Rosés, B.A., B.A., (Calif., Berkeley); M.P.P. (Harvard); Ph.D. (Illinois)

#### **Program Overview**

SCARP's professional master's program, the MCRP, prepares students to be practicing planners in a rapidly changing and urbanizing world. Cumulative program requirements provide students with real world experience and prepare them for entry into a wide variety of planning jobs. The curriculum features a strong sequence of required courses tailored to the evolving demands of the profession. Students additionally undertake concentrated study through a sequence of courses customized for their interests and

professional aspirations, or they can choose a pre-determined concentration in Urban Design or Indigenous Community Planning. The program culminates in a studio that integrates theories and methods covered throughout the curriculum into a single teambased project with a real or simulated client or community group. All students complete a capstone project on a topic of their own choosing.

#### **Admission Requirements**

All applicants must meet the admission requirements of Graduate and Postdoctoral Studies. English language proficiency standards, including TOEFL and GRE requirements are listed at (hotlink to:

http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,345,0).

In addition to meeting the University's academic standards for admission, SCARP requires that students submit a 500-word statement outlining their specific interests as well as providing information on their professional experience and community involvement. The SCARP Admissions Committee oversees the admissions process to the School.

#### **Transfer Credit**

Students are limited to transferring a maximum of 12 credits toward their master's program. Six credits of transfer credit may be at the undergraduate level (300-400-level). In order to be eligible for transfer, the course(s) must be:

- completed with a minimum B standing (74% UBC-equivalency)
- not have been counted toward the completion of another degree or program
- completed no more than five years prior to the time the student commences the degree program
- not be used as a basis for admission to the graduate program

#### **Program Requirements**

The total program credit requirement is 48 credits that include courses that incorporate accreditation performance criteria along with what faculty members collectively agree every planner needs to know. Each student is required to complete a concentration comprising a set of at least 12 credits that can be tailored to the student's interests, through careful consultation with an advisor, or they can choose from one of two predetermined concentrations: Indigenous Community Planning, or Urban Design. Along with a 3/6-credit capstone (generally an individual professional report, but with an option for a group capstone), the program features a required 6-credit studio and 3-credit internship. Electives make up the remaining 3 or 6 credits.

#### **Contact Information**

School of Community and Regional Planning 433-6333 Memorial Road Vancouver, BC V6T 1Z2

Tel: (604) 822-4422

Email: <a href="mailto:ptop@mail.ubc.ca">ptop@mail.ubc.ca</a>

www.scarp.ubc.ca

#### 5. Program Resources

#### 5.1. Program Funding

Removed for purposes of Curriculum; may be requested.

#### 5.2. Qualified Faculty

The following faculty members of the School of Community and Regional Planning are directly appointed to the School (permanent, tenure-track) and have complete responsibility for design and implementation of the MCRP program. One faculty member (Chang) is cross appointed in the Institute for Resources, Environment and Sustainability; Frank is cross appointed with the School of Population and Public Health; and Angeles is cross appointed in the Institute for Gender, Race, Sexuality and Social Justice.

Angeles, Leonora Chang, Stephanie Frank, Larry Gurstein, Penelope Hutton, Thomas Leaf, Michael McDaniels, Timothy Sandercock, Leonie Senbel, Maged Stevens, Mark Honey-Rosés, Jordi

#### 5.3. Library Resources

The Art + Architecture + Planning library in the Irving K. Barber Learning Centre stocks the major planning journals and houses a large collection of urban design literature. Addition of the MCRP program does not necessitate a significant commitment to new acquisitions.

#### 5.4. Administration

#### Master of Community and Regional Planning Program Manager (1.0 FTE)

The MCRP program requires a 1.0 FTE Program Manager. The program manager: orients students to the program and pairs them with faculty advisors; establishes a corps of mentors; strengthens the existing internship program for masters students; and conducts outreach and communication with alumni, the planning profession, and external partners. Development of the internship program includes identifying and facilitating internship opportunities, organizing internship information sessions, and improving the system for monitoring internships.

#### 5.5. Space Requirements

West Mall Annex (WMAX) contains rooms for student desks and offices, a reading room, a kitchen/lunchroom, and a lounge space. Classrooms are also located in WMAX, and the majority of SCARP courses are taught there. The budget for the MCRP program includes funds, beginning in 2015/16, for renting one classroom of approximately 800sf to accommodate larger core classes. The budget also includes funds for substantially upgrading the kitchen/lunchroom/lounge space with new furnishings to make the space more attractive, comfortable, and functional for SCARP students.

#### 5.6. Contact Information

**Penny Gurstein** (Professor and Director)

School of Community and Regional Planning, Faculty of Applied Science

Tel: 604-822-6065

Email: <a href="mailto:penny.gurstein@ubc.ca">penny.gurstein@ubc.ca</a>

Web: www.scarp.ubc.ca

#### 5.7 References Cited

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#### 6. Appendices

#### **APPENDIX 1: Budgetary Impact of Curriculum Proposals**

Removed for purposes of Curriculum; may be requested.

#### **APPENDIX 2: SCARP Faculty**

Removed for purposes of Curriculum; may be requested.

## APPENDIX 3: UBC Curriculum – Calendar Excerpts, Supporting Materials for New Courses

#### **APPENDIX 4: UBC Curriculum – Unit Summary Report and Consultations**

Removed for purposes of Curriculum; may be requested.

#### **APPENDIX 5: UBC Curriculum – Library Consultations**

Removed for purposes of Curriculum; may be requested.

#### **APPENDIX 6: Comparison of Existing and Proposed Degree Programs**

Removed for purposes of Curriculum; may be requested.

## APPENDIX 7: Outlines of Indigenous Community Planning and Urban Design Concentrations

Removed for purposes of Curriculum; may be requested.

## APPENDIX 3: UBC CURRICULUM – CALENDAR EXCERPTS, SUPPORTING MATERIALS FOR NEW COURSES

#### Master of Community and Regional Planning (MCRP)

- 3.1 New Program Listing
- 3.2 Extension of Current Course Code
- 3.3 New Program Listing under SCARP listing
- 3.4 New Course Calendar Excerpts and Outlines

Outlines removed for purposes of Curriculum; may be requested.

PLAN 508 (3) Foundations of Planning Theory and History

PLAN 509 (2) Urbanism as a Global Way of Life

PLAN 510 (2) Environment and Sustainability Concepts for Planning Practice

PLAN 521 (3) Quantitative Skills for Planners

PLAN 522 (2) Qualitative Data Collection and Analysis

PLAN 523 (2) The Profession of Planning

PLAN 524 (2) Legal Concepts for Professional Planning

PLAN 525 (2) Planning Practice Methods

PLAN 526 (6) Selected Topics in Experiential Learning: The Planning Studio

PLAN 527 (3) Internship

PLAN 528 (3/6) D Capstone Professional Report

#### 3.1 NEW PROGRAM LISTING

Category: 1

**Faculty:** Faculty of Applied Science (APSC)

**School:** School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 1

Year: 2015

Date: November 1, 2013 Contact Person(s):

School of Community and Regional Planning, Faculty of Applied Science

**Penny Gurstein** (Professor and

Director)

**Tel**: 604-822-6065

Email: penny.gurstein@ubc.ca

#### **Proposed Calendar Entry:**

Degree Offered: MCRP

## Members – Community and Regional Planning Professors

S. E. Chang, L. D. Frank, P. C. Gurstein, T. Hutton, T. McDaniels, L. Sandercock.

**Professors Emeriti** 

A. H. J. Dorcey, W. E. Rees.

**Associate Professors** 

L. C. Angeles, M. Leaf.

**Assistant Professors** 

M. Senbel, M. Stevens, J. Honey-Rosés

#### **Program Overview**

SCARP's professional master's program, the MCRP, prepares students to be practicing planners in a rapidly changing and urbanizing world. Cumulative program requirements provide students with real world experience and prepare them for entry into a wide variety of planning jobs. The curriculum features a strong core sequence of courses tailored to the evolving demands of the profession. Students additionally undertake concentrated study through a sequence of courses customized for their interests and professional aspirations. The program culminates in a studio that integrates theories and methods covered throughout the curriculum into a single team-based

URL: N/A

Present Calendar Entry: None

**Type of Action:** Create New Program

#### Rationale:

The MCRP is an innovative and flexible program that anticipates and responds to fast changing urban, regional, and global environments. It is intensive and professionally oriented, and students emerge as well-rounded, critical, and creative agents of change. Cumulative program requirements provide students with real world experience and prepare them for entry into a wide variety of planning careers.

project with a real or simulated client or community group. All students complete a capstone project on a topic of their own choosing in consultation with their advisor.

#### **Admission Requirements**

All applicants must meet the admission requirements of Graduate and Postdoctoral Studies. English language proficiency standards, including TOEFL and GRE requirements are listed at (hotlink to:

http://www.calendar.ubc.ca/vancouver/index.cf m?tree=12,204,345,0).

In addition to meeting the University's academic standards for admission, SCARP requires that students submit a 500-word statement outlining their specific interests as well as providing information on their professional experience and community involvement. The SCARP Admissions Committee oversees the admissions process to the School.

#### Transfer Credit

Students are limited to transferring a maximum of 12 credits toward their master's program. Six credits of transfer credit may be at the undergraduate level (300-400-level). In order to be eligible for transfer, the course(s) must be:

- completed with a minimum B standing (74% UBC-equivalency)
- not have been counted toward the completion of another degree or program
- completed no more than five years prior to the time the student commences the degree program
- not be used as a basis for admission to the graduate program

#### **Program Requirements**

The total program credit requirement is 48 credits, including 18 credits of required courses that incorporate accreditation performance criteria and essential background for planning. These are:

PLAN 508 (3) Foundations of Planning Theory and History PLAN 509 (2) Urbanism as a Global Way of Life

PLAN 510 (2) Environment and Sustainability Concepts for Planning Practice

PLAN 521 (3) Quantitative Skills for Planners

PLAN 522 (2) Qualitative Data Collection and Analysis

PLAN 523 (2) The Profession of Planning

PLAN 524 (2) Legal Concepts for Professional Planning

PLAN 525 (2) Planning Practice Methods

In addition, each student is required to complete a capstone project (PLAN 528) for 3 or 6 credits, a 6-credit studio (PLAN 526) and a 3-credit internship (PLAN 527). For the remaining 12 credits, students can choose courses tailored to their interests through consultation with an advisor, or they can choose between one of two pre-determined concentrations: Urban Design or Indigenous Community Planning.

#### **Contact Information**

School of Community and Regional Planning 433-6333 Memorial Road Vancouver, BC V6T 1Z2

Tel: (604) 822-4422 Email: <a href="mailto:ptop@mail.ubc.ca">ptop@mail.ubc.ca</a> www.scarp.ubc.ca

#### 3.2 EXTENSION OF CURRENT COURSE CODE

Category: 1

**Faculty:** Faculty of Applied Science (APSC) **School:** School of Community and Regional

Planning (SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 1

**Year:** 2015

Date: November 1, 2013

**Contact Person:** 

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

Tel: 604-822-6065

Email: penny.gurstein@ubc.ca

#### **Proposed Calendar Entry:**

PLAN: Planning

#### URL:

http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name

Present Calendar Entry: PLAN: Community and Regional Planning

**Type of Action:** Broaden course code to include all SCARP degree programs.

#### Rationale:

The existing course code of PLAN covers courses under the current M.A./M.Sc. in Planning and Ph.D. programs in Community and Regional Planning. SCARP is requesting that the PLAN course code be extended to include all courses associated with the Master of Community and Regional Planning (MCRP).

- X Not available for Cr/D/F grading. (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)
- □ Pass/Fail or □ Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)

Document ID# Dec12-C-2 U/G: G

#### 3.3 NEW PROGRAM LISTING UNDER EXISTING SCARP LISTING

Category: 1

**Faculty:** Faculty of Applied Science (APSC)

Schools: School of Community and Regional

Planning (SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 1

Year: 2015

Date: November 1, 2013

**Contact Person:** 

School of Community and Regional Planning **Penny Gurstein** (Professor and Director)

**Tel:** 604-822-6065

Email: penny.gurstein@ubc.ca

Proposed Calendar Entry:

**Master of Community and Regional Planning** 

URL:

http://www.calendar.ubc.ca/vancouver/index.cf m?tree=12,200,310,0

Present Calendar Entry: None

Type of Action: New Program listing under

SCARP

Rationale:

The MCRP is an innovative and flexible program that anticipates and responds to fast changing urban, regional, and global environments. It is intensive and professionally oriented, and students emerge as well-rounded, critical, and creative agents of change. Cumulative program requirements provide students with real world experience and prepare them for entry into a wide variety of planning careers.

Document ID# Dec12-C-3 U/G: G

#### 3.4 NEW COURSE CALENDAR EXCERPTS AND OUTLINES

#### PLAN 508 (3) Foundations of Planning Theory and History

Category: 1

Faculty: Faculty of Applied Science (APSC)

School: School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 1

**Year:** 2015

#### **Proposed Calendar Entry:**

## PLAN 508 (3) Foundations of Planning Theory and History

This course is not eligible for Credit/D/Fail grading.

Date: November 1, 2013

**Contact Person:** 

School of Community and Regional Planning **Penny Gurstein** (Professor and Director)

Tel: 604-822-6065

Email: penny.gurstein@ubc.ca

Present Calendar Entry: None
Type of Action: Create New Course

Rationale:

This course fulfills the History and Principles of Community Planning Processes and Practices knowledge component as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by ensuring that students understand the history and essential theory that underlie the planning profession; develop as reflective practitioners, agents of change, and supporters of informed decision making towards sustainable communities; and comprehend the complexities of the interrelationship of human communities with their historical, social, political, economic, and environmental contexts.

Planning theory has a central role in renewing planning practices, and in turn is enriched by reflection on those practices. In pursuing planning practice there must be sensitivity not only to the rich complexity of differences in contemporary cities, but also to the ecological challenges of living sustainably on the planet. Therefore, students must be informed about the theories and paradigms that underlie present practices (and their historical roots) and also be able to see the flaws in those theories, their exclusions, and inconsistencies. This course is an important component of the MCRP curriculum, and a requirement for accreditation.

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

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

Document ID# Dec12-O-1 U/G: G

## PLAN 509 (2) Urbanism as a Global Way of Life Category 1

Faculty: Faculty of Applied Science (APSC)

School: School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 1

Year: 2015

#### **Proposed Calendar Entry:**

PLAN 509 (2) Urbanism as a Global Way of Life This course is not eligible for Credit/D/Fail grading.

Date: November 1, 2013

#### **Contact Person:**

School of Community and Regional Planning **Penny Gurstein** (Professor and Director)

**Tel:** 604-822-6065

Email: penny.qurstein@ubc.ca
Present Calendar Entry: None
Type of Action: Create New Course

#### Rationale:

This course fulfills the Structure and Function of Human Settlements knowledge component as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by ensuring that students understand the history and consequences of the shift in human settlements towards greater global urbanization; the effects of this shift on community, regional, and global sustainability; and the complexities of the interrelationship of human communities with their historical, social, political, economic, and environmental contexts in a rapidly globalizing world.

This required course is structured around the long historical shift in human settlements to an increasingly urban world, and the arguably more recent expansion of interconnectivities between places, referred to as globalization and its influence on the nature of urbanism around the world. Understanding the intersection of these trends is considered by SCARP to be essential for any practicing planner, and is an important requirement of SCARP's continued accreditation.

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

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

U/G: G

Document ID# Dec12-O-2

## PLAN 510 (2) Environment and Sustainability Concepts for Planning Practice Category: 1

Faculty: Faculty of Applied Science (APSC)

School: School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012 Effective Session: Winter, Term 1 or 2

Year: 2015

#### **Proposed Calendar Entry:**

## PLAN 510 (2) Environment and Sustainability Concepts for Planning Practice

This course is not eligible for Credit/D/Fail grading.

Date: November 1, 2013

#### **Contact Person:**

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

**Tel:** 604-822-6065

Email: penny.qurstein@ubc.ca
Present Calendar Entry: None
Type of Action: Create New Course

#### Rationale:

This course fulfills the Environmental and Ecological Aspects of Planning knowledge component as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by ensuring that students have a basic understanding of the biophysical environments and systems that are crucial components of sustainable communities, and the interaction of those systems with social and economic factors in planning.

PLAN 510 covers key concepts in ecological and environmental planning. Topics will include biogeochemical cycles; species distribution and diversity; adaptation and natural selection; migrations; food webs; disturbance and succession; invasive species; urban ecology; the ecological footprint; ecological economics; ecosystem services; energy and water policy; and landscape ecology. In a world undergoing rapid climate change, these topics are crucial to professional planning education. This content is identified by SCARP's accrediting bodies and by SCARP faculty as an important component of the required curriculum.

- X Not available for Cr/D/F grading. (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)
- □ Pass/Fail or □ Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)

Document ID# Dec12-O-3 U/G: G

#### PLAN 521 (3) Quantitative Skills for Planners

Category: 1

Faculty: Faculty of Applied Science (APSC)

School: School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 1

Year: 2015

#### **Proposed Calendar Entry:**

## PLAN 521 (3) Quantitative Skills for Planners This course is not eligible for Credit/D/Fail grading.

Date: November 1, 2013

#### **Contact Person:**

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

**Tel:** 604-822-6065

Email: penny.gurstein@ubc.ca
Present Calendar Entry: None
Type of Action: Create New Course

#### Rationale:

This course partially fulfills the Analytical Skills, Problem Identification, Research Skills, and Data Gathering Skills components as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by ensuring that students are familiar with information sources commonly used by have the essential knowledge of and competency in quantitative analytical skills as they relate to defining planning problems, and can use these skills to generate alternative solutions, and inform planning-related policies and programs. Students will become familiar with a variety of research techniques, and will be able to appropriately and effectively use these methods and tools in identifying problems and developing potential solutions in complex planning situations.

The course enables students to develop basic capabilities in working with quantitative data for analysis in professional planning practice, including the appropriate use of statistical measures. This includes developing core vocabulary, conceptual understandings, critical awareness, analytical capabilities, and computer skills. These capabilities are needed in all areas of planning practice, from environmental to transportation, housing, and social planning.

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

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

Document ID# Dec12-O-5

U/G: G

#### PLAN 522 (2) Qualitative Data Collection and Analysis

Category: 1

Faculty: Faculty of Applied Science (APSC)

**School:** School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 1

Year: 2015

CAT 1

#### **Proposed Calendar Entry:**

## PLAN 522 (2) Qualitative Data Collection and Analysis

This course is not eligible for Credit/D/Fail grading.

Date: November 1, 2013

#### **Contact Person:**

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

**Tel:** 604-822-6065

Email: penny.gurstein@ubc.ca
Present Calendar Entry: None
Type of Action: Create New Course

#### Rationale:

This course partially fulfills the Analytical Skills, and the Problem Identification, Research Skills, and Data Gathering Skills and Ethics components as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by ensuring that students are reflective and ethical practitioners; have the essential knowledge of and competency in qualitative analytical skills as they relate to defining planning problems, generating alternative solutions, and informing policies and programs; and are fluent in a variety of methods for presenting research results to diverse audiences.

This required course introduces students to the fundamentals of qualitative data collection and analysis for professional planning practice. The course focuses on the conceptualization and operationalization of research question(s), ethical considerations, data collection, selection of analytical framework, analysis, interpretation, and presentation of research findings to specific audiences. Literacy in qualitative methods is considered an essential skill for any practicing planner by both SCARP faculty and SCARP's accrediting bodies.

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

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

Document ID# Dec12-O-6 U/G: G

#### PLAN 523 (2) The Profession of Planning

Category: 1

Faculty: Faculty of Applied Science (APSC)

School: School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 1

Year: 2015

#### **Proposed Calendar Entry:**

#### PLAN 523 (2) The Profession of Planning

This course is not eligible for Credit/D/Fail grading.

Date: November 1, 2013

#### **Contact Person:**

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

**Tel**: 604-822-6065

Email: penny.gurstein@ubc.ca
Present Calendar Entry: None
Type of Action: Create New Course

#### Rationale:

This course fulfills the Roles and Responsibilities of Planners knowledge component, Written, Oral and Graphic Communications and Collaborative Problem Solving Skills components, and the Ethics component as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by ensuring that students are reflective and ethical practitioners; are able to assume leadership roles when working as members of teams; and understand the role of digital and information technology in engaging and informing the public about planning issues.

This required course provides an interactive and experiential learning environment that provides skills for life-long reflective practice, ethical deliberation, and leadership. Students have the opportunity to demonstrate leadership by developing a plan from initial visioning to implementation. Students simultaneously are exposed to theories, stories, and scenarios of planning practice and then reflect on the ethical implications of various courses of action. The course also covers the challenges, opportunities and ethical dimensions of using digital and social media in planning practice.

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

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

U/G: G

Document ID# Dec12-O-7

#### PLAN 524 (2) Legal Concepts for Professional Planning

Category: 1

Faculty: Faculty of Applied Science (APSC)

School: School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 2

Year: 2015

#### **Proposed Calendar Entry:**

## PLAN 524 (2) Legal Concepts for Professional Planning

This course is not eligible for Credit/D/Fail grading.

Date: November 1, 2013

#### **Contact Person:**

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

Tel: 604-822-6065

Email: penny.gurstein@ubc.ca
Present Calendar Entry: None
Type of Action: Create New Course

#### Rationale:

This course fulfills the Legislative, Legal, Political, and Administrative Aspects of Planning and Policy Implementation, and the Methods of Policy Implementation and Planning knowledge components as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by ensuring that students have a basic knowledge of the legal context in which planning takes place, both provincially and nationally, and an understanding of their role as implementers, as well as advocates, advisors, decision makers, and policy makers within the context of public law.

This required course is an introduction to some of the legal concepts and principles that are of use to a professional planner, and in any private or public role in which planners seek to shape public outcomes in relation to growth management, planning, land-use, and social issues. Planners who work for government exercise power. Planners who consult for citizens assert rights. This course is about the interface between power and rights and about the role of the Courts (known as judicial review) in establishing the rules within which the interplay between public decision making authority and private rights takes place.

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

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

U/G: G

Document ID# Dec12-O-8

## PLAN 525 (2) Planning Practice Methods Category: 1

Faculty: Faculty of Applied Science (APSC)

**School:** School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter, Term 1 or 2

**Year:** 2015

**Proposed Calendar Entry:** 

PLAN 525 (2) Planning Practice Methods

This course is not eligible for Credit/D/Fail grading.

Date: November 1, 2013

**Contact Person:** 

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

Tel: 604-822-6065

Email: penny.gurstein@ubc.ca

Present Calendar Entry: None Type of Action: Create New Course

Rationale:

This course fulfills the Legislative, Legal, Political, and Administrative Aspects of Planning and Policy Implementation; the Methods of Policy Implementation and Planning; and the Roles and Responsibilities of Planners knowledge components as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by ensuring that students have the knowledge and skills to protect the public interest by identifying feasible options, structuring decision processes, and identifying the trade-offs and long-term consequences inherent in all significant public policy choices.

This required course introduces and develops familiarity with concepts and methods that are basic to current planning practice. These include (i) a multiple objective view of policy analysis (multiple accounts analysis) and (ii) planning that actively involves stakeholders (including civil society and technical specialists) through an approach termed "structured decision making." SCARP considers these skills as an essential part of education for planning practice, and they are a required component for professional accreditation.

- X Not available for Cr/D/F grading. (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)
- □ Pass/Fail or □ Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)

Document ID# Dec12-O-9 U/G: G

## PLAN 526 (6) Selected Topics in Experiential Learning: The Planning Studio Category: 1

**Faculty:** Faculty of Applied Science (APSC)

School: School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

Effective Session: Winter. Term 1

**Year:** 2015

#### **Proposed Calendar Entry:**

## PLAN 526 (6) Selected Topics in Experiential Learning: The Planning Studio

Date: November 1, 2013

**Contact Person:** 

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

Tel: 604-822-6065

Email: penny.gurstein@ubc.ca
Present Calendar Entry: None
Type of Action: Create New Course

Rationale:

This course fulfills the Collaborative Problem Solving Skills, and the Synthesis and Application of Knowledge to Practice skills components, and the Ethics component as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by providing an experiential learning opportunity in which students work as members of a team on a planning project for a real or simulated client. This affords them the opportunity to apply their knowledge and skills in a practice setting, and to experience the personal and professional ethical dilemmas that often arise when dealing with "wicked problems."

This course offers students the opportunity to develop solutions to planning problems, under the guidance of the instructor(s), both within a classroom setting, and through working as part of a team with a client group in a community-based context. It enables students to apply the theories and methods covered in the core curriculum and electives in a single problem-based project. Students have the opportunity to undertake field studios in a number of international settings, including the Philippines, Costa Rica, and Vietnam.

The course meets the studio requirement within the MCRP program. All MCRP students must take one 6-credit studio course

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

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

U/G: G

Document ID# Dec12-O-10

#### PLAN 527 (3) Internship

Category: 1

Faculty: Faculty of Applied Science (APSC)

School: School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012

**Effective Session:** Summer Term

**Year:** 2015/16

**Proposed Calendar Entry:** 

PLAN 527 (3) Internship

Pass/fail

Date: November 1, 2013

**Contact Person:** 

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

**Tel:** 604-822-6065

Email: penny.gurstein@ubc.ca
Present Calendar Entry: None
Type of Action: Create New Course

Rationale:

This course fulfills the Collaborative Problem Solving Skills, and the Synthesis and Application of Knowledge to Practice skills components, and the Ethics component as established and required for program accreditation by the Canadian planning accreditation body, the Professional Standards Board (PSB).

The course also fulfills overall academic objectives of the MCRP program by providing students with the opportunity to work in a planning context, under the supervision of their advisor and an agency partner, to realize pre-determined academic learning objectives, develop as reflective practitioners, and to experience how the theory and methods they have learned in coursework are operationalized in a practice setting.

The required Internship provides the mechanism for students to earn academic credit for relevant work experience outside the University. An Internship is essentially a three-way partnership among the student, the agency, and the School. The Internship may relate to the student's capstone professional report and have the same Faculty Supervisor, but it is a separate "stand alone" endeavour. The primary goal of the Internship Program is to assist students to develop professional skills and capabilities through guided "hands on" experience in a workplace environment while gaining academic credit. Typically an Internship involves the equivalent of one day per week during one term: other agreed upon arrangements are possible. Students may work with local government planning offices and development firms.

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

U/G: G

Document ID# Dec12-O-11

#### PLAN 528 (3/6) D Capstone Professional Report

Category: 1

**Faculty:** Faculty of Applied Science (APSC)

School: School of Community and Regional Planning

(SCARP)

Faculty Approval Date: December 13, 2012 Effective Session: Summer Year 1 and Winter Year

2

Year: 2015

#### **Proposed Calendar Entry:**

## PLAN 528 (3/6) D Capstone Professional Report This course is not eligible for Credit/D/Fail grading.

Date: November 1, 2013

#### **Contact Person:**

**Penny Gurstein** (Professor and Director) School of Community and Regional Planning

**Tel:** 604-822-6065

Email: penny.qurstein@ubc.ca
Present Calendar Entry: None
Type of Action: Create New Course

#### Rationale:

The capstone's major purpose is to provide students an opportunity to demonstrate the breadth of their planning education and to synthesize their knowledge of planning. Students demonstrate their ability to work as a reflexive planner through completing an individual planning or urban design project. Students gain experience in project design and scoping, in researching project-relevant literature, in the application of appropriate analytic methods, in the analysis of context-specific data, and in the formulation of appropriate conclusions.

Registration in PLAN 528 is required for both Summer and Winter Sessions beginning in the summer of the first year and continuing until completion of the capstone.

The majority of students will receive 3 credits. The 6-credit option is intended primarily for students in the Indigenous Community Planning (ICP) concentration who are required to complete an 8-month practicum in an Indigenous community for 12 credits. The 6-credit capstone is combined with the 6-credit studio requirement (in this case, supervised community-based planning experience) to constitute the 12-credit practicum requirement. ICP students write a final report (both for SCARP and for the Aboriginal community in which they worked) and present the results at a public presentation as their capstone.

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

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

Document ID# Dec12-O-12 U/G: G



Office of the Senate

Brock Hall | 2016 - 1874 East Mall Vancouver BC V6T 1Z1

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

16 April 2014

To: Vancouver Senate

From: Senate Curriculum & Admissions Committees

Re: Master of Engineering in Naval Architecture and Marine Engineering

(approval)

The Senate Curriculum and Admissions Committees have reviewed the material forwarded to them by the Faculty of Applied Science and are pleased to recommend to Senate the following:

**Motion:** "That Senate approve the new Master of Engineering in Naval

Architecture and Marine Engineering program."

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

## **Proposal**

# Master of Engineering in Naval Architecture and Marine Engineering Program

**MEng NAME** 

February 24, 2014 edits March 18, 2014

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Sustainability

#### **Executive Summary**

1. Credential: Master of Engineering in Naval Architecture and Marine Engineering

(Abbreviation: MEng NAME)

**2. Location:** The University of British Columbia (UBC), Point Grey Campus

**3. Faculty:** Faculty of Applied Science

4. Anticipated

September 2014

Start Date:

**5. Anticipated** The MEng NAME will be delivered as an intensive one-year (3

Completion Time: semester) program.

#### 6. Program Description and Overview

The MEng NAME program strives to provide students with a comprehensive and innovative education that enables them to design and construct ships and other structures in the marine environment. The program was designed in response to the \$38-billion federal shipbuilding procurement project and a commitment by Seaspan Vancouver Shipyards to provide \$4 million in funding to support a Masters program in this field. UBC's Mechanical Engineering department has offered undergraduate courses in Naval Architecture since 1975, and in 2013, in anticipation of the proposed MEng NAME, the department introduced 8 new graduate-level courses and 2 new undergraduate courses in Naval Architecture and Marine Engineering.

#### 6.1. Objectives

- Equip tomorrow's naval architects and marine engineers with the critical thinking and practical skills necessary to make important contributions to the shipbuilding industry and to make Canada a leader in the global shipbuilding market.
- Link the research of faculty in Mechanical, Civil, and Materials Engineering to the concerns of extra-university partners by offering students a project-based curriculum that explores cutting edge naval architecture concepts in collaboration with industry professionals in the Vancouver region.
- Emerge as the leading institution for the continuing education of current leaders in the shipbuilding industry, and for the training of tomorrow's leaders.
- Graduate highly skilled naval architects and marine engineers who can fill the 15,000
  jobs expected to open in Canada in the next 30 years as a result of the federal
  shipbuilding procurement project.
- Continue to develop a high profile faculty with international expertise in the theory and practice of naval architectural engineering.

#### 6.2. Contribution to UBC Mandate and Strategic Plan

The UBC Plan promises to "creat[e] an exceptional learning environment" and work "towards global citizenship." With the involvement of local industry and faculty from various disciplines, the MEng NAME program offers an exceptional learning environment for students and faculty undertaking research. In addition, the NAME program will attract students from around the world to study in Vancouver's maritime environment and graduate students who will, in turn, be in demand across the globe. Like the university itself, the ship is a symbol of exploration, learning, and the global exchange of resources

and knowledge; accordingly, the MEng NAME program shares many of UBC's strategic goals.

#### 6.3. Content

The MEng NAME requires students to complete 30 credits of core coursework, which includes a 4-credit capstone design project and a 2-credit, 16-week internship. As the final core course of the program, the internship is designed to synthesize the skills and knowledge acquired throughout the program and help students understand and conform to the employment environment. After completing the internship, students will be fully prepared to enter the workforce.

#### 6.4. Delivery methods

The MEng NAME core courses will involve a combination of classroom learning and hands-on training. In the first term, students will take 12 credits of coursework, and in the second term, 12 credits of coursework accompanied by part-time work on the capstone design project. The summer term will be comprised of three weeks of full-time work on the design project, followed by an internship arrangement with a local company or agency from mid-May until the end of August.

#### 6.5. Links between learning outcomes and curriculum design

The number and variety of courses available to students is purposely limited to ensure a robust and streamlined learning experience that is centered on the MEng NAME program objectives. Students who complete the MEng NAME will have the ability to perform a preliminary design of a ship or other marine vessel, including structural design and analysis, materials selection, fabrication methods, management and costing of the shipbuilding process, conformance to required rules and regulations, and outfitting the ship with engine and other systems. Each of these learning outcomes corresponds to one of the NAME courses, and summarizes the goal of that course.

#### 6.6. Enrolment Plan

The number of students admitted into the program will be capped at 30 students. It is expected that the cohort size will be between 12 (low) and 30 (high) students with an average of 24 students entering the program within five years.

#### 6.7. Potential Sectors of Employment for Graduates

Graduates of the MEng NAME program can expect to find careers locally, nationally, and internationally, in such areas as: ship design, ship construction, marine supply, ship operation, and shipbuilding regulation, as well as the government and academia. With over \$30 billion in expected marine activity in Canada the future looks very promising for graduates of the program. Ship design and construction is a global industry with active sectors in USA, Europe, Asia, and Australia.

#### 6.8. Opportunities for Further Study

The MEng NAME program is designed primarily for students who wish to enter the workforce after graduation, and therefore it is anticipated that most or all of the graduating students will go on to work in the industry. It is possible, however, that a small number of students will continue to PhD-level study at UBC or elsewhere.

#### 6.9. Level of support and recognition from other post-secondary institutions

In the one year that the NAME courses have been offered as part of the Mechanical Engineering MEng, we have seen notable support from other post-secondary institutions. In particular, the program is supported by two world-renowned Visiting Professors from the

University of Michigan. Many of Canada's top universities have also demonstrated their support by advertising the NAME courses to their students, which resulted in a significant number of applications from across the country. Given UBC's history of expertise in naval architecture, ocean engineering and coastal engineering, it is expected that the program will be widely recognized and supported both in Canada and abroad.

#### 6.10. Related programs at UBC or other BC post-secondary institutions.

#### 6.10.1. The University of British Columbia

Many of the advanced topics that will be covered under the NAME program are already available through programs in Civil, Mechanical, Electrical, and Materials Engineering at UBC, but the NAME program will synthesize this material and offer a more interdisciplinary, specialized approach.

#### 6.10.2. Other British Columbia universities

No other universities in British Columbia offer accredited graduate level programs in Naval Architecture or Marine Engineering.

#### 6.11. Policies on program assessment

In parallel to internal reviews used to evaluate professional degrees conducted according to the Faculty of Applied Science and UBC governance guidelines, the NAME program will be evaluated and developed based on the recommendations of an Advisory Committee. This expert panel of outside professionals and academics will meet once per term. Committee membership will be approved by the Dean of the Faculty of Applied Science.

#### 6.11. Program Strengths

The MEng NAME program offers a comprehensive curriculum that is grounded in collaborative community projects, and that draws upon the combined expertise of faculty in Mechanical, Civil, and Materials Engineering, and of industry professionals. The courses alone, as part of the MEng in Mechanical Engineering, attracted 14 students in 2013/14 (32% of all MEng MECH students), and significant demand has already been shown, by both students and potential employers, for a dedicated program in this field. The program is the only one if its kind in Canada, and with the support and involvement it has already received from industry leaders and world-renowned faculty, it promises to make UBC an international leader in the fields of naval architecture and marine engineering.

#### 7. Contact Person(s)

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## Proposal: MASTER OF ENGINEERING IN NAVAL ARCHITECTURE AND MARINE ENGINEERING

#### 1. Degree to be offered

Title: Master of Engineering in Naval Architecture and Marine Engineering

(Abbreviation: M.Eng. NAME)

**Faculties:** Faculty of Applied Science (APSC)

**Location:** The University of British Columbia (UBC), Point Grey Campus

Start Date: September 2014

#### 2. Program Rationale

#### 2.1. Background

The Mechanical Engineering department at UBC started teaching and researching Naval Architecture as part of their Thermofluids specialty option in 1975, and today, it is the only academic institute on the west coast of North America providing undergraduate courses in this field. With the ocean covering over 70% of the earth, naval architects, like those who graduate from UBC, play a key role in transportation and recreation, and are crucial for the military and for commerce.

Graduates from UBC's existing undergraduate Naval Architecture stream have been successful at finding work locally, nationally, and internationally, but as a specialized skill, Naval Architecture and Marine Engineering is most often taught as a graduate program. A Master of Engineering program allows for the delivery of specialized courses to students and practicing engineers who are interested in advanced training beyond a Bachelors Degree. UBC already has strong bonds with local industry through the existing undergraduate program, and increasing enrolment rates in that program show students' increasing awareness of, and interest in, the field, and predicts a high demand for a graduate program.

In 2011, Seaspan Vancouver Shipyards was awarded an \$8-billion contract from the Canadian government as part of the \$38-billion federal shipbuilding procurement project, which is expected to generate more than 15,000 jobs over the next 30 years. As part of the initial bid package, UBC faculty members and industry partners developed a Value Proposition proposing that the undergraduate program be expanded into a full M.Eng Degree Program. In the spring of 2012, members of UBC's Faculty of Applied Science met with Seaspan Vancouver Shipyards to formalize the development of the Masters level engineering program in Naval Architecture and Marine Engineering for modern naval and coast guard ships. Seaspan intends to provide \$4 million in funding to support this program, to be distributed over the next 10 years at \$400,000 per year. In anticipation of this, UBC introduced a new Naval Architecture & Marine Engineering (NAME) focus to its existing Master of Engineering in Mechanical Engineering program, including 8 new graduate-level courses and 2 new undergraduate courses, and admitted its first cohort of NAME-focused Masters students in September 2013.

Over the past year and a half, UBC has formed and worked closely with a Program Advisory Committee consisting of faculty from Mechanical, Civil, and Materials Engineering, and representatives from Seaspan, STX Marine, Robert Allan Ltd., Lloyd's Register, Teekay Corporation, and the Royal Canadian Navy. The following program proposal is the result of collaborative planning on the part of this committee.

#### 2.1.1. Defining Naval Architecture and Marine Engineering

Naval Architecture and Marine Engineering are two subspecialties within Mechanical and/or Civil Engineering and they are concerned with all aspects (design, construction, maintenance and operation) of waterborne vehicles operating on, below, or just above the sea surface. Individually, Naval Architecture is concerned with hull design, including hull structure, hull resistance, and ship stability. Marine Engineering, on the other hand, is concerned with systems engineering on ships and offshore platforms. Taken together, a program in Naval Architecture and Marine Engineering will equip students with skills required to perform all duties pertaining to ocean vessels – from pleasure crafts to cargo ships, ferries to naval weaponry.

#### 2.2. Program Objectives

#### 2.2.1. Mission

The program strives to provide students with a comprehensive and innovative education that will enable them to design and construct ships and other structures in the marine environment. The program is concerned with all aspects (design, construction, maintenance and operation) of waterborne vehicles, and will enable graduates to practice professionally in these industries.

#### 2.2.2. Objectives

- Equip tomorrow's naval architects and marine engineers with the critical thinking and practical skills necessary to make important contributions to the shipbuilding industry and to make Canada a leader in the global shipbuilding market.
- 2. Capitalize on Vancouver's marine environment and UBC's current industry connections by offering an attractive hands-on education that allows students to get valuable work experience and allows BC's shipbuilding companies to benefit from the minds of UBC's top engineering students.
- 3. Link the research of faculty in Mechanical, Civil, and Materials Engineering to the concerns of extra-university partners by offering students a project-based curriculum that explores cutting edge naval architecture concepts in collaboration with industry professionals in the Vancouver region.
- 4. Emerge as the leading institution for the continuing education of current leaders in the shipbuilding industry, and for the training of tomorrow's leaders.
- 5. Graduate highly skilled naval architects and marine engineers who can fill the 15,000 jobs expected to open in Canada in the next 30 years as a result of the federal shipbuilding procurement project.

6. Continue to develop a high profile faculty with international expertise in the theory and practice of naval architectural engineering.

#### 2.3. Contribution to UBC Mandate and Strategic Plan

Highlighted in *Place and Promise: The UBC Plan* is the promise to "creat[e] an exceptional learning environment" and work "towards global citizenship." The MEng NAME will act as one route to the fulfillment of this promise. With the involvement of faculty from Mechanical, Civil, and Materials Engineering; the development of new laboratory facilities and the improvement of existing study spaces; and collaboration with local industry in the areas of student mentorship, sponsored research topics, and internship job placements, the NAME program will offer an exceptional learning environment for students and for faculty undertaking research. In addition, the NAME program will attract students from around the world to study in Vancouver's maritime environment and graduate students who will, in turn, be in demand across the globe.

The ship is the very reason we can speak of globalization today. It is a symbol of exploration, learning, and the global exchange of resources and knowledge—not unlike the university itself. Accordingly, the MEng NAME program addresses many of the goals outlined in *The UBC Plan*:

#### **Student Learning**

- Enhance the quality and impact of teaching for all students.
- Strengthen efforts to promote student success.
- Expand educational enrichment opportunities, including research, a first year small class experience, international learning, community service learning, and coop/practicum/ internship opportunities.

The MEng NAME will offer a comprehensive curriculum that draws upon the combined expertise of faculty in Mechanical, Civil, and Materials Engineering, and of industry professionals. The program will synthesize theory and practice through a challenging project-based learning experience that will equip students with the skills and experience needed to excel in one of the world's most important and fast-growing industries. The number and variety of courses available to students will be purposely limited, as will student enrolment, to ensure a robust and streamlined learning experience that is centered on the MEng NAME program objectives. As well, strong industry support and existing relationships between UBC Engineering and local Naval Architecture companies promises students both a rich educational experience and employment opportunities after graduation.

#### **Innovation Excellence**

- Increase the quality and impact of UBC's research and scholarship.
- Be a world leader in knowledge exchange and mobilization.

Although there are several institutions in the United States offering similar programs, there is currently only one institution in Canada (Memorial University of Newfoundland) that offers Naval Architecture training at the graduate level. Despite the fact that BC is home to many of Canada's leading shipbuilding companies, graduates from UBC's undergraduate engineering programs (including one that focuses on Naval Architecture) must travel across the country to get advanced training in this field. As a leading research and

educational facility, UBC is expected to be a world leader, and *the* Canadian leader, in a field that is by nature invested in "knowledge exchange and mobilization." By expanding UBC's current scholarship in the field of naval architecture to include a Masters program, UBC will not only be a leader in the exchange of knowledge about marine structures; it will also, by contributing to the shipbuilding industry, be a central part of the means by which people and knowledge are mobilized.

#### **Community Engagement**

• Be a leader in fostering student, faculty, staff, and alumni engagement within the wider community.

Engaging with local Naval Architecture companies with regard to the needs of the marine sector is one of the key components of the MEng NAME program. With a curriculum grounded in collaborative community projects, a reciprocal and experiential learning environment will be created between students and local industry.

#### **International Engagement**

- Increase the capacity of UBC students, faculty, staff, and alumni to engage internationally.
- Strengthen UBC's presence as a globally influential university, and strengthen UBC's role in international development.

From cruise ships to ferries to mercantile vessels, ships are crucial to the mobilization of people and goods across international borders, and are consequently needed all over the world. The MEng NAME program will graduate students who will be in demand across the globe, but more importantly, it will graduate the trained professionals needed to ensure the self-sufficiency of Canada's shipbuilding industry, and the global influence of Canada itself. A strong shipbuilding industry, backed by highly qualified professionals, is key to securing Canada's global presence – to improving and sustaining Canada's military and economy, and strengthening Canada's contribution to the global market. By offering the MEng NAME program, UBC will therefore become an invaluable player in both national and international development.

#### **Outstanding Work environment**

Be the place of choice for outstanding faculty and staff.

UBC and the Vancouver region provide an excellent environment for those interested in marine structures, and therefore it is anticipated that the MEng NAME program will attract the very best faculty and staff. Vancouver is not only a maritime location but also one of the most livable cities in the world, and UBC has a long tradition of expertise in the related areas of naval architecture, ocean engineering and coastal engineering, with many current and former faculty members in these fields. The prospect of this program has already attracted two world-renowned specialists in the field, Thomas Lamb and Michael Parsons from the University of Michigan, and they are both currently teaching NAME courses introduced in September 2013.

#### 2.4. Relationship to Established Programs

#### 2.4.1. The University of British Columbia

Many of the advanced topics that will be covered under the NAME program are already available through programs in Civil, Mechanical and Materials Engineering at UBC, but the NAME program will synthesize this material and offer a more interdisciplinary and specialized approach.

## • Master of Engineering in Mechanical Engineering (MEng MECH) Faculty of Applied Science

The Master of Engineering is a non-thesis, course-based professional program designed for students who would like to further their education without pursuing research, or individuals who wish to advance their careers with enhanced technical and management knowledge. Last year, in preparation for the MEng NAME, the Mechanical Engineering department began admitting students into the existing "Master of Engineering in Mechanical Engineering, with a focus in Naval Architecture and Marine Engineering" (MEng MECH, NAME) program. It is intended that once the MEng NAME is implemented, students from the MEng MECH, NAME will be transferred into the new program and the MEng MECH, NAME will be discontinued. The proposed program will continue to conform to the Master of Engineering guidelines currently in place at UBC, and will offer courses previously approved for the MEng MECH, NAME. However, in order to foster the interdisciplinary character of the field of Naval Architecture & Marine Engineering, and to be consistent with similar programs offered internationally, it is important that the existing NAME courses be part of a unique program rather than simply a focus within Mechanical Engineering.

#### Master of Applied Science (MASc)

Faculty of Applied Science

The thesis-based Master of Applied Science is a traditional research-based degree intended for students who may be interested in pursuing a PhD. The program normally takes two years of full-time study, includes a total of thirty credits, research under the supervision of a faculty member and a thesis. There is no Naval Architecture and Marine Engineering specialization offered, and the program's focus is on research rather than practice. Moreover, because it is a lengthier program that requires full-time study, it is not suitable for people already working in the industry. The MEng NAME program will cater to students that will study full-time for 8 months and then can complete their program off-campus while in their internship.

#### Bachelor of Applied Science (BASc)

Faculty of Applied Science

The Bachelor of Applied Science is a four- or five-year undergraduate degree program that consists of a faculty-wide foundation year followed by at least three years of program-specific coursework. Students who have completed the BASc. in Mechanical Engineering (BASc. MECH), Civil Engineering (BASc. CIVL), Materials Engineering (BASc. MTRL) or Integrated Engineering (BASc. IGEN) will be eligible to apply for admission into the MEng NAME program. However, while applicants from Mechanical Engineering will have the necessary background in Structural Mechanics, Fluid Mechanics, Automatic Control, and Thermofluids, students from Civil, Materials, and Integrated Engineering may lack proficiency in one or more of these areas, and may be required to complete coursework in the missing area(s) either prior to entering the program or concurrently with the NAME courses. BASc. graduates in departments other than MECH, CIVL, MTRL, or IGEN will

likely not have a suitable background for the NAME program, but may be accepted with the approval of the Director.

## • Bachelor of Applied Science in Mechanical Engineering (BASc. MECH) Faculty of Applied Science

With the exception of the temporary MEng MECH, NAME, The Bachelor of Applied Science in Mechanical Engineering is the closest thing UBC offers to a Naval Architecture program. In the third year, Mechanical Engineering students have the option of taking three technical electives in Naval Architecture. Students who choose this focus thus complete 113 credits for the degree, of which only 9 are specific to Naval Architecture. If the MEng NAME program is offered, students interested in this field can transition smoothly into a Masters-level program. The comprehensive curriculum will provide much more thorough training than students can get at the Bachelors level, and will give students the knowledge and experience they need to excel in the industry. The MEng NAME program and the BASc. MECH will share one course, MECH 488 (Ship Hydrodynamics I).

#### 2.4.2. Other British Columbia universities

No other university in British Columbia offers a dedicated Master of Engineering in Naval Architecture and Marine Engineering program. Although the British Columbia Institute of Technology's (BCIT) School of Transportation offers a Diploma of Technical Studies in Marine Engineering, and Camosun College offers a Nautical Training program, there are currently no universities in British Columbia that offer accredited *graduate* programs in naval architecture or marine engineering.

#### • Diploma of Technical Studies in Marine Engineering

School of Transportation
British Columbia Institute of Technology

The only dedicated Marine Engineering program available to students of any academic level in British Columbia is a Transport Canada accredited 4-year diploma program offered by BCIT. The Diploma of Technical Studies in Marine Engineering is a cooperative education program that teaches the principles of construction, operation and maintenance of diesel engine propulsion plants on ships. It consists of 4 terms of classroom instruction interspersed with 3 co-op terms, and is designed for students interested in becoming licensed Marine Engineers on merchant ships. The MEng NAME program will be much more heavily focused on Naval Architecture, with the awareness that successful naval architects must also understand Marine Engineering. It will offer a greater breadth of curriculum and intensity of teaching than a diploma program can offer, and will be intended for students and professionals who have already received rigorous Engineering training.

Program Tuition Fees (2012)	Domestic	International
Year 1	\$ 6,178	\$21,368
Year 2	\$ 3,278	\$10,718
Year 3	\$ 3,162	\$10,292
Year 4	\$ 2,668	\$9,798
Total tuition (2012)	\$ 15,286	\$52,176

#### Nautical Training

School of Trades and Technology

#### Camosun College

The Transport Canada Certified Nautical Training program at Camosun College trains students to become ship officers or captains. The courses fulfill the educational requirements for certificates of competency in the areas of Watchkeeping Mate, Chief Mate, Master, and Fishing Master. Tuition is charged per course and ranges from \$71.60 to \$966.60, with the average course tuition at \$395.68. Depending on the area for which the student desires certification, the number of required courses ranges between 5 and 15. There is very little similarity between Camosun's Nautical Training programs and the proposed UBC MEng NAME in terms of training or certification. Students in the MEng NAME will not be training to become officers or captains on board ships, but rather, to design and construct the actual vessels, and will receive an advanced engineering degree rather than the Transport Canada Certificate of Competency, which is the highest credential offered by the Camosun program.

#### • Engineering Bridge Program

School of Trades and Technology Camosun College

In partnership with UBC, Camosun College offers Engineering Bridge programs designed to provide students with qualifying technology diplomas direct access to the third year of a Civil, Mechanical, or Mining Engineering bachelor's program at UBC. Bridge programs consist of two 12-week quarters in sequence, beginning in early January and finishing at the end of June. Successful students transfer into the first academic term of third year engineering at UBC in September. The Bridge Program in either Civil or Mechanical Engineering will be useful to students with Technology diplomas who wish to enter the MEng NAME, because it will allow otherwise ineligible students to obtain (in 2.5 years) the equivalent of a 4-year bachelor's degree that is required for admission into the UBC MEng.

	Mechanical Engineering Bridge	Civil Engineering Bridge
Tuition	\$ 3,745	\$ 3,494
Student fees	\$ 511	\$ 511
Total	\$ 4,256	\$ 4,005

#### 2.4.3. Other Canadian Institutions

Only one Canadian university, Memorial University of Newfoundland, currently offers a dedicated graduate-level program in naval architecture and marine engineering. According to their website, "The ocean and naval architectural engineering program at Memorial University is the only one of its kind in Canada." The program can be taken at the Bachelor level (BEng O&NA), the Masters level (MEng O&NA), and the Doctor of Philosophy level (PhD O&NA), and involves the design, analysis and management of floating, underwater and wave-measuring buoys, underwater vehicles, sonar and other acoustic systems and offshore platforms. Other than Memorial University, the only Canadian schools that offer related programs are the Canadian Coast Guard College in Nova Scotia and Georgian College in Ontario, but these are not graduate-level programs and so are not considered competition.

## Bachelor of Engineering in Ocean and Naval Architectural Engineering (BEng O&NA)

Faculty of Engineering and Applied Science

#### Memorial University

Memorial University's Bachelor of Engineering in Ocean and Naval Architectural Engineering "is one of the top of its kind in North America and is the only co-operative ocean and naval architectural engineering program in the world," according to their website. Designed to prepare students either for graduate studies in ocean engineering, or for "work in marine transport, ship and boat building, offshore engineering, [and] submersibles design," the 141 credit hour program requires a total of eight academic terms and four work terms. After a full year of general engineering curriculum, students take courses in ocean engineering hydrostatics, marine production management, resistance and propulsion of ships, fluid mechanics, marine engineering systems, submersibles, design, marine hydrodynamics, ocean systems design and advanced marine vehicles. Graduates from this program should transition smoothly into the MEng NAME at UBC, and may have up to 6 credits of approved core course equivalents taken prior to admission, allowing some room for electives. As this program is designed for students with no postsecondary education or professional training, and involves a full year of introductory Engineering, it should not compete with the MEng NAME proposed here, and should rather offer more opportunities for advanced study for MUN graduates.

	Coursework	Work terms	Total for Program
Domestic tuition (2012)	\$ 11,985	\$ 1,292	\$ 13,277
International tuition (2012)	\$ 41,359.53	\$ 4,080	\$ 45,439.53

#### Master of Engineering in Ocean and Naval Architectural Engineering (MEng O&NA)

Faculty of Engineering and Applied Science Memorial University

The Master of Engineering in Ocean and Naval Architectural Engineering at Memorial is the program most similar to the MEng NAME program proposed here, but structurally it is more similar to a Master of Applied Science in Engineering from UBC. The two-year MEng O&NA involves five graduate courses and a research thesis, which can be pursued in areas such as marine hydrodynamics, marine structures, underwater vehicles, arctic engineering and offshore safety and marine simulation. The proposed MEng NAME, on the other hand, is a one-year, non-thesis program that involves 8 courses, a capstone project and an internship, and which will attract students and professionals looking for a less research-heavy, more practice-based curriculum. It is therefore anticipated that the MEng O&NA from MUN will not compete significantly with the MEng NAME from UBC. Moreover, with the rise in shipbuilding jobs expected in the next few years, Canada will need more than one institution (with very limited enrolment) offering this type of training.

Domestic tuition per year (2012)	\$ 4,398
International tuition per year (2012)	\$ 5,718

## • Doctor of Philosophy in Ocean and Naval Architectural Engineering (PhD O&NA) Faculty of Engineering and Applied Science Memorial University

The PhD O&NA at Memorial University normally takes three years to complete and is comprised of two courses beyond the master's level and an original research thesis. As

students must already possess a Masters degree to enter this program, it should not compete with the proposed MEng NAME program.

Domestic tuition per year (2012)	\$ 8,196
International tuition per year (2012)	\$ 10,644

## • Bachelor of Technology in Nautical Science (Marine Engineering) Canadian Coast Guard College

The Bachelor of Technology in Nautical Science at the Canadian Coast Guard College (granted in partnership with Cape Breton University) offers training for Officer Cadets in Marine Engineering. The program, which is also a salaried job, alternates between academic training at the College and time at sea on a Coast Guard vessel. The College only accepts those with a Canadian passport. As this degree is not considered equivalent to a 4-year bachelor's degree in engineering at UBC, students who graduate with the Bachelor of Technology from this institution will not be eligible for the MEng NAME unless they complete Camosun College's Civil or Mechanical Engineering Bridge Program.

#### • Diploma in Marine Engineering Technology

School of Engineering Technology Georgian College

The Diploma in Marine Engineering Technology at Georgian College's School of Engineering Technology is a three-year co-operative cadet training program for those seeking employment as a ship's Engineering Officer. Students take 43 mandatory courses and 2 communications courses at the Owen Sound College and 2 co-op work terms on board ships. As this is not considered equivalent to a 4-year bachelor's degree in engineering at UBC, students who graduate with this diploma will not be eligible for the MEng NAME unless they complete Camosun College's Civil or Mechanical Engineering Bridge Program.

#### 2.4.4. Level of support and recognition from other post-secondary institutions

As a new program, support and recognition from other post-secondary institutions is limited. However, the Head of the NAME department at the University of Michigan—the leading university in the US for naval architecture and marine engineering training—has indicated support for the program in meetings with the UBC NAME Director, and two retired emeritus professors from that institution are teaching three of the NAME courses that were introduced this year. Professors Thomas Lamb (who teaches NAME 522 and NAME 524) and Michael Parsons (NAME 578) are recognized internationally for their research and publications in the field, and it is anticipated that their participation in the program will promote further support from institutions that offer similar programs both nationally and internationally. Many of Canada's top universities also demonstrated their support last year by advertising the NAME focus of the MEng MECH to their students, which resulted in a significant number of applications from across the country. Given UBC's history of expertise in naval architecture, ocean engineering and coastal engineering, and the fact that UBC's engineering programs have been ranked second in the nation and among the top 50 worldwide (Times Higher Education), it is expected that other post-secondary institutions both in Canada and abroad will recognize and support this program.

#### 2.5. Demand for Program

The demand for naval architects and marine engineers is growing rapidly, and Canada currently has neither the trained personnel required to meet the needs of the \$38-billion federal shipbuilding procurement project, nor the means of training them. There is currently only one institution in Canada—Memorial University in Newfoundland—that offers graduate-level naval architecture and marine engineering training, and no other Canadian institution that offers industry-focused (rather than research-oriented) training at this level. Moreover, there is no school on the West Coast of Canada offering anything even comparable to the proposed MEng NAME, which means that Seaspan Vancouver Shipyards will have to look to the East Coast or abroad, rather than here at home, for workers to fill the numerous job openings resulting from their \$8-billion share of the federal project. In the United States, degree programs in naval architecture and marine engineering are more common, with graduate-level programs offered by the University of Michigan, the University of New Orleans, and the State University of New York, and undergraduate degree programs offered by these institutions plus the United States Coast Guard Academy, United States Naval Academy, Webb Institute, and Maine Maritime Academy.

The demand for this program comes from multiple sides. British Columbia and Canada need a program like the proposed MEng NAME for the success of the provincial and federal shipbuilding industry, and to stay competitive with international markets. There is demand from Seaspan Vancouver Shipyards for trained workers to fulfill their government shipbuilding contracts, as well as demand from students for training that will allow them to take advantage of the expansion of the Canadian shipbuilding industry. Given UBC's location, the research of current faculty, and the recent achievements of UBC undergraduate students in the field of naval architecture (UBC has won three separate international vessel-design competitions this past year), it is appropriate that UBC be the institution to implement a graduate-level NAME program that is lacking in Canada and now more important than ever.

#### 2.5.1. Enrolment Predictions and Capacity

Significant demand is anticipated for the MEng NAME program. The desirability of an education that can promise immediate and prosperous employment after graduation is reflected in the interest we have seen in the NAME courses so far. In the first year that it was offered (2013), the NAME focus of the Mechanical Engineering MEng attracted 21 applicants, 32% of all Mechanical Engineering MEng applicants and more than any other MEng MECH focus area. Of the 14 students currently enrolled, 2 are from India, one is from China, 4 are from Ontario, and one is from Newfoundland. Two of the original 16 admitted have deferred acceptance until 2014, and, as of February 2, 2014, an additional 19 applications (15 international and 4 domestic) have already been submitted for the upcoming September 2014 entry. It is predicted that many of the fourth-year UBC BASc students currently taking the undergraduate-level NAME courses (students from MECH, CIVL, and IGEN) will also apply for the program, and that domestic applications will surpass international applications as the domestic deadline of May 1, 2014 approaches.

The superior training that UBC can offer students in the field of naval architecture and marine engineering can be seen in the recent successes of our undergraduate students. UBC has won the international SailBot competition two years in a row (and received the first-ever perfect score this year), as well as the 2013 Society of Naval Architects and Marine Engineers (SNAME) Lisnyk Design Competition for a Coast Guard Buoytender and the 2013 World Ferry Safety Association's Safe Affordable Ferry competition. It is

predicted that a graduate-level NAME program will attract both these talented fourth-year UBC undergraduate students and students from abroad who hear about UBC's achievements in the field of naval architecture and marine engineering. Taking all of these factors into account, it is expected that applications for a dedicated MEng NAME program in 2014 will surpass this year's applications to the NAME focus of the MEng MECH. To maintain a vibrant learning environment and admit the best and brightest applicants, however, the cohort size will be purposely limited to 30 students.

#### 2.5.2. Potential Sectors of Employment for Graduates

As highlighted on the SNAME website, "Naval Architecture, Marine and Ocean Engineering are fast growing and dynamic fields with plentiful opportunities that are improving as people turn to the oceans for resources such as food, transportation and energy. These engineers must be creative and visionary to see the potential to use transportation and the oceans effectively. Government, industry and academia are hungry for experts and researchers to develop new processes and systems to explore and travel the ocean with minimal or no danger to its habitat and environment. Marine structures, vessels and ocean systems are unique because only a small number of each design is built, they are very large and complex, and they operate in this environment. Anything that operates in this environment has special design requirements relevant to seakeeping, capsizing, stationkeeping, and random motions and loads in a hostile environment. Due to this uniqueness, the manufacturing is often more challenging and expensive." Careers for graduates of the M.Eng program will include ship design offices (examples include STX Marine Canada, Robert Allan Ltd. Babcock, etc.), ship construction (Seaspan Shipyards, Halifax Shipyards, etc.), marine suppliers (Catepillar Diesel Engines, Corvus Energy, etc.), ship operators (BC Ferries, Teekay Corp., etc.), regulators (Lloyds Registry, Canadian Coast Guard, etc.), as well as Government (Transport Canada, Canadian Navy, etc.) and Academia (National Research Council, Universities, etc). With over \$30 Billion in expected marine activity in Canada the future looks very promising for graduates of the program. Graduates can expect to find careers locally, nationally, and internationally. Ship design and construction is a global industry with active sectors in USA, Europe, Asia, and Australia.

#### 2.5.3. Opportunities for Further Study

The Master of Engineering degree at UBC is generally not recommended for students who wish to continue on to a PhD, and the MEng NAME will conform to this. Rather, the program is designed primarily for students who wish to enter the workforce after graduation. The MEng NAME is a response to the industry's need for naval architects, and much of the program's funding comes from companies looking to eventually hire our graduates. As such, it is anticipated that most or all of the graduating students will go on to or return to work in the industry. It is possible, however, that a small number of students will continue to PhD-level study at UBC or elsewhere.

#### 3. Program Description and Specifications

#### 3.1. Admission Requirements

Minimum admission criteria for the NAME program will meet those of the Master of Engineering program currently in place at UBC. Applicants must hold the academic equivalent of a four-year bachelor's degree in engineering from UBC and the degree should be in Civil, Materials or Mechanical Engineering or equivalent. For international applicants, the English requirement should conform to a minimum IELTS score of 6.5 with no band lower than 6.0 (or TOEFL iBT score of 80). Applicants who have not fulfilled these requirements, but who have several years of relevant professional experience to offset such deficiencies, may be granted admission on the recommendation of the Program Director.

In addition to the above requirements, students must have demonstrated proficiency in the areas of Structural Mechanics, Fluid Mechanics, Automatic Controls, and Thermodynamics. Students lacking a background in these subject areas may be required to complete additional coursework at the discretion of the Program Director.

#### 3.2. Curriculum

The core curriculum of the MEng NAME has a large number of courses, so there is limited flexibility. It requires a minimum of 30 credits of coursework, which includes 18 credits of 500-level core courses, 6 credits of 300- or 400-level undergraduate coursework, a 4-credit capstone design project and a 2-credit, 16-week internship. However, up to 6 credits may be approved for core course equivalents taken prior to admission, allowing for streamlined entry and limited room for constrained electives (chosen from a prescribed list of graduate courses).

#### 3.2.1. Learning Outcomes

In addition to possessing the Graduate Attributes outlined by Canadian Engineering Accreditation Board's *Accreditation Criteria and Procedures* (2008), students who complete the Master of Engineering in Naval Architecture and Marine Engineering at UBC will, more specifically, have the ability to:

- Assess the risk and reliability of a ship's structural components and apply basic concepts of matrix stiffness and finite element analysis to the design of a ship structure.
- Understand hydrodynamic behaviour of unique vessels and vessel conditions—including catamarans, submarines, semi-submersibles, floating offshore platforms, and the planing of high-speed vessels—and predict ocean wave interactions with a vessel.
- Understand shipyard layouts and assembly strategies to optimize material and work flow, and possess a thorough understanding of the various fabrication techniques used in shipbuilding.
- Use computer-aided planning tools to develop a detailed preliminary work plan for the construction of a ship, and understand the business and economic elements of ship production including planning, scheduling, budgeting and cost accounting.
- Describe ship motions in calm water and in regular and random waves, and analyze the maneuvering behaviour of ships, including estimating turning radius, motion stability, and course keeping.
- Understand the behaviour of ship propulsion systems and how to match propulsion systems with engine plants, and select and size a propeller system for a specified vessel.

- Understand the basic thermodynamic principles behind steam, diesel, and turbine cycles, and design shafting and gear reduction systems for a ship using the principles of on-board systems such as fuel, piping, HVAC, electrical and sewage.
- Understand and use the ShipMo<sup>™</sup> and Siemens NX Ship<sup>™</sup> software used by industry professionals.
- Perform a preliminary design of a ship or other marine vessel, including structural design and analysis, materials selection, fabrication methods, management and costing of the shipbuilding process, conformance to required rules and regulations, and outfitting the ship with engine and other systems.

#### 3.3. Program Requirements

The MEng NAME program will be delivered as an intensive one-year program. It is anticipated that this will be favorable to post-professional students already in the workplace. The MEng NAME will require students to complete 30 core credits as follows: 6 credits of undergraduate courses, 18 credits of graduate courses, a 4-credit capstone design project, and a 2-credit internship. In the event that internships are not available, students will undertake an internal internship project involving unpaid collaboration with a faculty member.

#### 3.3.1. Delivery and Core Courses

The MEng NAME core courses will involve a combination of classroom learning and hands-on training. With the exception of CIVL 437 and MECH 488, all of the core courses offered through the MEng NAME will be restricted to students enrolled in the program. In the first term, students will take 12 credits of coursework, which will include the undergraduate courses and two intensive-format graduate-level courses. In the second term, students will take 12 credits of coursework (including 6 credits of intensive-format courses) and begin working part-time on the capstone design project. The project will involve both team collaboration and individual research and application. The summer term will be comprised of three weeks of full-time work on the design project, followed by an internship arrangement with a company or agency from mid-May until the end of August.

To facilitate the participation of Visiting Instructors and accommodate students already working in the industry, four of the NAME graduate courses are offered in intensive-format. These 3-week intensive courses have classes 3 hours per day Monday-Friday, with every second week off (so each course runs for a total of 6 weeks including off-weeks).

#### 3.3.2. Courses offered in the MEng NAME Curriculum

The MEng NAME does not require any new courses. In preparation for the new program, the core courses were established last year under the NAME focus of the existing Mechanical Engineering MEng.

	Credits	Term	Instruction
NAME Core Courses (Required)			
CIVL 437: Introduction to Ship Structures	3	1	Professor and industry adjunct
MECH 488: Introduction to Ship Hydrodynamics	3	1	Professor
NAME 578: Marine Engineering *	3	1	Visiting Professor
NAME 522: Ship Production and Industrial Engineering *	3	1	Visiting Professor
NAME 501: Advanced Ship Structures	2	2	Professor
NAME 502: Advanced Ship Hydrodynamics	4	2	Professor
NAME 566: Ship Dynamics and Control *	3	2	Professor
NAME 524: Shipbuilding Project Management *	3	2	Visiting Professor
NAME 591: Computer-Aided Ship Design Project	4	2&S	Professor and industry adjunct
NAME 592: Shipbuilding Internship	2	S	Professor and industry adjunct
TOTAL CORE Course Credits	30		

<sup>\*</sup> indicates intensive-format course

#### 3.3.3. Outline of Program for a Typical Student

The NAME program's emphasis on core courses means that each student cohort will follow a consistent timetable. An outline of the NAME program delivery and core courses for a typical student is shown below:

Winter Session – Term 1 (September – December)		
CIVL 437: Introduction to Ship Structures	3	
MECH 488: Introduction to Ship Hydrodynamics	3	
NAME 578: Marine Engineering *	3	
NAME 522: Ship Production and Industrial Engineering *	3	
Winter Session – Term 2 (January – April)		
NAME 501: Advanced Ship Structures	2	
NAME 502: Advanced Ship Hydrodynamics	4	
NAME 566: Ship Dynamics and Control *	3	
NAME 524: Shipbuilding Project Management *		
Summer Session – Term 1 and Term 2 (May – August)		
NAME 591: Computer-Aided Ship Design Project	4	
NAME 592: Shipbuilding Internship	2	
TOTAL CREDITS		

As an example of how the intensive-format courses will run, the dates in which these courses ran in 2013/2014 are shown in the table below:

	Week 1	Week 2	Week 3
NAME 578	Sept. 9 – Sept.13	Sept. 23 – Sept. 27	Oct. 7 – Oct. 11
NAME 522	Oct. 8 – Nov. 1	Nov. 12 – Nov. 15	Nov. 25 – Nov. 29
NAME 524	Jan. 13 – Jan. 17	Jan. 27 – Jan. 31	Feb. 10 – Feb. 14
NAME 566	Feb. 24 – Feb. 28	Mar. 10 – Mar. 14	Mar. 24 – Mar. 28

#### 3.4. Supervision and Evaluation

Unlike the other MEng programs at UBC, a student in the NAME program will not be assigned a single, dedicated supervisor, but will rather be supervised day-to-day in their work by the various instructors of the NAME courses. Coursework is evaluated through mini-projects, exams, homework assignments and in-class quizzes. The capstone project will be supervised and evaluated by a professor and industry adjuncts, while the internship will be supervised mainly by the sponsoring company, and given a final mark by the professor based on the company's report and the student's final report and presentation. Expectations of students will be formalized through individual course syllabi.

#### 3.5. Policies on Program Management and Assessment

In parallel to internal reviews used to evaluate professional degrees conducted according to the Faculty of Applied Science and UBC governance guidelines, the NAME program will be evaluated and developed based on the recommendations of an Advisory Committee. This expert panel of outside professionals and academics will meet once per term. Committee membership will be approved by the Dean of the Faculty of Applied Science.

# 4. Calendar Statement - Program

# **UBC Curriculum Proposal Form**

Category: (1)

Faculty: Faculty of Applied Science (APSC)

Schools:

Faculty Approval Date: October 31, 2013

Effective Session: Winter, Term 1

**Year:** 2014

**Date: October 18, 2013** 

Contact Person(s):

Department of Mechanical Engineering,

Faculty of Applied Science

Jon Mikkelsen (Professor and Director)

Tel: 604-822-2709

Email: name@apsc.ubc.ca

Faculty of Applied Science Dean's Office **Deborah Feduik** (Manager, MEng & Graduate

Programs)

Tel: 604-822-8386

Email: gradprog@apsc.ubc.ca

URL:

http://www.calendar.ubc.ca/vancouver/inde

x.cfm?tree=12,195,838,0

# **Proposed Calendar Entry:**

# **Master of Engineering**

The Master of Engineering (M.Eng.) program is suited to students who wish to pursue their engineering education in a preferred area of specialization beyond the undergraduate level, but who do not wish to pursue a thesis research program. Applicants who are considering taking a Doctor of Philosophy (Ph.D.) in the future should apply for admission to the Master of Applied Science (M.A.Sc.) through the Faculty of Graduate Studies.

Typical completion time for full-time Master of Engineering students is 12-16 months.

The Faculty of Applied Science administers the Master of Engineering program. Please visit the <a href="Program">Program</a> for a full listing program policies and procedures.

#### **Admission Requirements**

**Note:** Master of Engineering degrees alone do not form an acceptable basis for application to

# Present Calendar Entry:

# **Master of Engineering**

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Typical completion time for full-time Master of Engineering students is 12-16 months.

The Faculty of Applied Science administers the Master of Engineering program. Please visit the <a href="Program">Program</a> for a full listing program policies and procedures.

# **Admission Requirements**

**Note:** Master of Engineering degrees alone do not form an acceptable basis for application to associations of professional engineers in

associations of professional engineers in Canada.

Applicants to the Master of Engineering program in all specializations except Engineering and Public Policy must hold a credential deemed academically equivalent to a four-year bachelor's degree from UBC, in engineering or a related discipline.

Applicants to the Engineering and Public Policy specialization must hold a credential deemed academically equivalent to a four-year bachelor's degree from UBC in engineering. Admission requirements also include successful completion of a minimum of a 3credit introductory course in microeconomics (equivalent to ECON 101) and a minimum of a 3-credit elementary statistics course (equivalent to STAT 251).

The minimum admission requirement for students with degrees from North American institutions is an average of 76% (UBCequivalency), calculated from senior-level coursework. An applicant with an average less than 76% may be admitted if they have achieved 80% or higher in at least 12 credits (UBC-equivalency) of senior-level coursework. and at least 74% in the remaining senior-level coursework, in the prospective area of study.

The minimum admission requirement for applicants with degrees from outside North America is an overall average of 76% (UBCequivalency).

For all specializations, relevant professional experience is considered an asset.

Applicants holding a four-year bachelor's degree who do not meet the admissions minimum, but who have had sufficient formal training and relevant professional experience to offset the academic deficiency, may be granted admission on the recommendation of the graduate advisor in the area of specialization and the approval of the Master of Engineering Program Office. Engineering Program Office.

For the Clean Energy Engineering

Canada.

Applicants to the Master of Engineering program in all specializations except Engineering and Public Policy must hold a credential deemed academically equivalent to a four-vear bachelor's degree from UBC, in engineering or a related discipline.

Applicants to the Engineering and Public Policy specialization must hold a credential deemed academically equivalent to a four-year bachelor's degree from UBC in engineering. Admission requirements also include successful completion of a minimum of a 3credit introductory course in microeconomics (equivalent to ECON 101) and a minimum of a 3-credit elementary statistics course (equivalent to STAT 251).

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Applicants holding a four-year bachelor's degree who do not meet the admissions minimum, but who have had sufficient formal training and relevant professional experience to offset the academic deficiency, may be granted admission on the recommendation of the graduate advisor in the area of specialization and the approval of the Master of

For the Clean Energy Engineering specialization, applicants must have taken at specialization, applicants must have taken at least 3 credits (UBC-equivalency) of thermodynamics at the second- or third-year level.

For the Naval Architecture and Marine Engineering specialization, applicants must have a background in the areas of Structural Mechanics, Fluid Mechanics, Automatic Controls and Thermodynamics. Students lacking a background in these subject areas may be required to complete additional coursework. For further information, consult the program website.

Applicants from a university outside Canada in which English is not the primary language of instruction must present evidence of competency prior to being extended an offer of admission. Acceptable English language proficiency tests for applicants to graduate studies include the TOEFL, IELTS, and MELAB. The required minimum is determined by the Graduate program office in the area of specialization, but must be at or above the university minimum for graduate-level study.

Students interested in applying to the Master of Engineering program must contact the individual graduate program office for their area of specialization. Students who are planning on taking the program on a part-time basis must obtain approval from their graduate program advisor prior to the commencement of the program. Lists of the required application documents are available on the respective websites. Each graduate program office in an area of specialization is responsible for collection and assessment of application documents. The Master of Engineering Program Office issues the offer of admission letter.

#### **Transfer Credit**

Courses taken as an Access Studies or nondegree student may be approved for transfer toward a graduate program with the permission of the graduate program and the Master of Engineering Program Office.

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Courses taken as an Access Studies or nondegree student may be approved for transfer toward a graduate program with the permission of the graduate program and the Master of Engineering Program Office.

Consistent with standard transfer credit regulations, students are limited to transferring a maximum of 12 credits or up to 40% of the program credit requirements, whichever is more, toward their master's program. No more than 6 credits of transfer credit may be at the undergraduate level (300-/400-level). In order to be eligible for transfer, the course(s):

must be completed with a minimum B standing (UBC-equivalency)

Consistent with standard transfer credit regulations, students are limited to transferring a maximum of 12 credits or up to 40% of the program credit requirements, whichever is more, toward their master's program. No more than 6 credits of transfer credit may be at the undergraduate level (300-/400-level). In order to be eligible for transfer, the course(s):

- must be completed with a minimum B standing (UBC-equivalency)
- must not have been counted toward the completion of another degree or program
- must have been completed no more than five years prior to the time the student commences the degree program
- must not be used as a basis for admission to the graduate program

#### **Financial Assistance**

Financial assistance is generally not available to students in the Master of Engineering program. Review each specialization website for specific assistance information.

# **Program Requirements**

The program requires completion of at least 30 credits. In some program areas, minimum requirements may be higher than 30 credits:

- At least 24 credits must be at the 500level.
- A minimum of 18 of the 24 credits must be in the program area at the 500-level, including a project, if required, up to a maximum 6 credits.
- A maximum of 6 credits may be taken at the 300-/400-level.
- A maximum of 6 credits of 500-level directed studies courses may be counted toward the program requirements.

Students should consult each specialization website for more information. Each student's coursework must be approved by the graduate

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Financial assistance is generally not available to students in the Master of Engineering program.

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- At least 24 credits must be at the 500level
- A minimum of 18 of the 24 credits must be in the program area at the 500-level, including a project, if required, up to a maximum 6 credits.
- A maximum of 6 credits may be taken at the 300-/400-level.
- A maximum of 6 credits of 500-level directed studies courses may be counted toward the program requirements.

Students should consult each specialization website for more information. Each student's coursework must be approved by the graduate program office for that area.

## **Specializations**

Biomedical Engineering

Chemical and Biological Engineering

Civil Engineering

Clean Energy Engineering

**Electrical and Computer Engineering** 

program office for that area.

# **Specializations**

**Biomedical Engineering** 

Chemical and Biological Engineering

Civil Engineering

Clean Energy Engineering

**Electrical and Computer Engineering** 

**Engineering and Public Policy** 

Geological Engineering

Materials Engineering

Mechanical Engineering

Mechatronics Design

Mining Engineering

# Naval Architecture and Marine Engineering

# **Engineering Management**

The Engineering Management subspecialization requires 12 credits of courses in management-related subjects, with a minimum of 6 credits of core courses and a maximum of 6 credits of elective courses. The chosen program area requirements must also be satisfied.

#### **Contact Information**

Master of Engineering Program Office

5000-2332 Main Mall Vancouver, BC V6T 1Z4

Tel: 604.822.8386 Fax: 604.822.7006

Email: gradprog@apsc.ubc.ca

Web: www.engineering.ubc.ca/prospective stu

dents/graduate/index.php
Deb Feduik, Coordinator

**Engineering and Public Policy** 

Geological Engineering

Materials Engineering

Mechanical Engineering

Mechatronics Design

Mining Engineering

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dents/graduate/index.php **Deb Feduik**, Coordinator

# Type of Action:

New Master of Engineering specialization

#### Rationale:

The Master of Engineering in Naval Architecture and Marine Engineering (MEng NAME) program will be the only one of its kind on Canada's west coast. It is designed to prepare students for work in Canada's rapidly expanding shipbuilding industry.

The creation of this program has been driven, in part, by strong interest from the external

community (whereby British Columbia will see a high level of shipbuilding activity over the next few decades), in part by a desire to collaborate between the Departments of Mechanical Engineering, Civil Engineering, and Materials Engineering, and in part to raise UBC's profile, attract students (both within Canada and abroad), and collaborate internationally.

It is necessary for the existing NAME focus of the Mechanical Engineering MEng that was introduced in 2013 to become its own program because (1) the courses emphasize interdisciplinary character of the NAME field and are taught by a combination of Mechanical, Civil, and Materials Engineering professors; (2) the MEng MECH degree title is not appropriate given that 100% of the core courses deal specifically with naval architecture and marine engineering; and (3) the NAME acronym is the recognized international standard for this training, and having it in the degree title will foster collaboration with industry and international institutions, and better attract students interested in this field.

# 5. Program Resources

# 5.1. Program Funding

It is intended that the \$400,000/year funding package from Seaspan will be used to leverage an NSERC Industrial Research Chair Proposal for Assoc./Full Professor. With the contributions from Seaspan and NSERC, the MEng NAME degree will be revenue generating or revenue neutral. The budget is characterized by high start-up costs resulting in a significant deficit in year one, followed by a rapid increase in year-end carry-forward into positive territory, and then finally a reducing year-end carry-forward as external funding ceases in 2024/25. The budget is sensitive to enrolment numbers and has been calculated for a low of 12 students in the first 3 years, although expected enrolment is 20-25 students.

# 5.1.1. Program Budget – not included

# 5.2. Qualified Faculty

Courses will be taught by a combination of faculty from Mechanical, Civil, and Materials Engineering at UBC; Visiting Professors; industry adjuncts and guest lecturers; and eventually, two NSERC Industrial Research Chairs. To lead the new curriculum a new 3.5 FTEs is proposed. The 1.0 FTE Tenure-track will be an Instructor that will be appointed by the Mechanical Engineering department and will be responsible for teaching many of the core courses, as well as teaching in the Mechanical Engineering department. The 0.5 FTE will be made up of qualified adjunct and sessional faculty. The remaining 2.0 FTEs will be the future Industrial Research Chairs, who will be hired jointly by Mechanical, Civil, and Materials Engineering, and who will take over the teaching responsibilities of the Visiting Faculty. Faculty from MECH, CIVL, and MTRL will also teach in the program where needed with compensation to the departments.

#### Tenure-Track Hires

The 1.0 FTE tenure-track appointment by Mechanical Engineering will be suitable for a junior-level academician who has a proven publication and teaching record as well as a specialization in the NAME area. The additional 2.0 FTE tenure-track appointments are expected to be NSERC Industrial Research Chair cross appointments between the three participating departments. Each Chair appointment will be suitable for an associate or full professor with an outstanding publication and teaching record, and exceptional standing in a research field related to ship building and design. Each Chair holder will to teach two courses in the MEng NAME program and develop a parallel research program in support of the ship building strategy of the industrial partner.

#### 5.2.1. Professors

Removed for purposes of Curriculum; may be requested.

# 5.2.2. Visiting Professors

Removed for purposes of Curriculum; may be requested.

#### 5.2.3. Adjunct Faculty

Removed for purposes of Curriculum; may be requested.

#### 5.2.4. Lecturers

Removed for purposes of Curriculum; may be requested.

#### 5.3. Library Resources

The NAME courses have already been approved by the library, and the MEng NAME program will not require any additional Library support.

#### 5.4. Administration

# MEng NAME Program Director (1.0 FTE)

A faculty member from Mechanical, Civil, or Materials Engineering will assume Program Director responsibilities. The Director will be appointed by the Dean of Applied Science. The Director will lead the implementation of the program and oversee its evolution, growth and position within the Faculty of Applied Science. As well as assuming teaching and research commitments, the program Director will represent the program on university

committees, manage program funding and coordinate fund raising. The Director will report to the Head of the lead department as appointed by the Dean of Applied Science.

The program Director will also be expected to lead the community outreach component of the program to secure internship opportunities. The Director will take an active role in developing the necessary community and industry linkages to establish a long-term and wide range of internship placements. The Director will become the principal point of contact for community and industry partners.

# MEng NAME Program Manager (0.6 FTE)

The program will require a 0.6 FTE administrator to support the Program Director. This program manager would assist in: student recruitment, student enquiries, website development and maintenance, applications and admissions, timetabling, classroom scheduling, and grant proposals. Support for admissions and records will also be provided by the Faculty of Applied Science Dean's Office.

#### 5.5. Space Requirements

The principal space requirement for the NAME program is a dedicated design studio, similar to the existing PACE lab, that would serve as a student workspace and computer lab. Additionally, office space will be needed to accommodate the 1.0 FTE academic hire, the 0.6 FTE administrative hire, and the 2.0 FTE Industrial Research Chairs (or, until the Chairs are hired, the Visiting Faculty). NAME courses will be held in existing classroom space in CEME. In the future, with additional fundraising, the program will benefit from an expanded hydraulics lab with a 40m towing tank. In the meantime, the program will use the existing hydraulics lab in CEME.

Space Requirements	Square meters
Dedicated Design Studio with Computer Lab	160
Faculty office space (x3)	30
Hydraulics Laboratory Space	200
Program Office	10
Total space requirements	400

#### 5.6. Contact Information

# **Contact Person(s):**

Department of Mechanical Engineering, Faculty of Applied Science

Jon Mikkelsen (Professor and Director)

Tel: 604-822-2709

Email: name@apsc.ubc.ca

Faculty of Applied Science Dean's Office

Deborah Feduik (Manager, MEng & Graduate Programs)

Tel: 604-822-8386

Email: gradprog@apsc.ubc.ca



Office of the Senate Brock Hall | 2016 - 1874 East Mall Vancouver BC V6T 1Z1

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

16 April 2014

To: Vancouver Senate

From: Senate Curriculum & Admissions Committees

Re: Entry-to-Practice Doctor of Pharmacy (approval)

The Senate Curriculum and Admissions Committees have reviewed the material forwarded to them by the Faculty of Pharmaceutical Sciences for the entry-to-practice Doctor of Pharmacy program and are pleased to recommend to Senate the following:

**Motion:** "That Senate approve the new entry-to-practice Doctor of Pharmacy

program and its associated new course code and courses."

Respectfully submitted,

Dr. Peter Marshall, Chair, Senate Curriculum Committee Dr. Robert Sparks, Chair, Senate Admissions Committee



Faculty of Pharmaceutical Sciences Vancouver Campus 2405 Wesbrook Mall Vancouver, BC Canada V6T 1Z3

27 March 2014

#### **MEMO**

TO: UBC Vancouver Senate

FROM: Faculty of Pharmaceutical Sciences
RE: Doctor of Pharmacy, entry-to-practice

The Faculty of Pharmaceutical Sciences approved the entry-to-practice Doctor of Pharmacy (E2P PharmD) New Program Proposal and course proposals for Professional Year (PY) 1 on 31 October 2013, and course proposals for PY2 through PY4 on 6 March 2014.

In support of our proposal currently under review, we offer some additional clarification that may help you as you consider the new program proposal.

 Will confusion result from having two different programs leading to the same degree (PharmD) while the graduate PharmD is being phased out?

Since the early 1990s when the U.S. began to phase in the PharmD degree as the sole entry-to-practice degree for pharmacists, multiple paths to attaining this degree have existed, including full-time graduate (post-baccalaureate) programs, "non-traditional" PharmD programs involving part-time distance education, and the entry-to-practice PharmD. Hundreds of pharmacists across Canada have attained a PharmD degree via all three paths. Our proposed program will not alter this situation. Changing the entry-to-practice degree from a BSc(Pharm) to a Doctor of Pharmacy (PharmD), phasing out our current graduate PharmD program, and creating a new Flexible PharmD pegged to the outcomes of the E2P PharmD are all steps in the direction of harmonizing the understanding of the PharmD degree.

Community and institutional employers are well aware of these routes to earn a PharmD degree because they have been available to Canadian pharmacists for over twenty years.

• What is the anticipated number of applicants to the new program and how many students will be accepted each year?

The BC Ministry of Health determines the number of health care trainees, including pharmacists, that they will fund. Our current class size of 224 was negotiated with the BC Ministries of Health and Advanced Education several years ago. Current indications from the Ministry of Health are that this remains an appropriate class size based on their health manpower forecasts for BC.

Based on current trends for an entry-to-practice pharmacy degree, we can expect to receive between 500 and 600 applicants per year.

 What about BSc students who may take a leave during their program? How will they be accommodated if they need to finish after September 2017?

The attrition rate for students in our Faculty is very low, less than 2%. We will treat these infrequent situations on a case-by-case basis and support those students however possible until they complete their BSc(Pharm) program.



# Are there any plans to deliver a PharmD program for people who already have a BSc(Pharm) and are working full-time?

We are in the process of developing a "Flexible PharmD" program for working pharmacists with a BSc(Pharm) who wish to earn the PharmD degree. We are fully engaged with UBC's Flexible Learning Professional Programs Initiative in this effort. The profession needs, and there is demand for, an avenue for pharmacists with a BSc(Pharm) to attain the new E2P degree credential and level of skill. When our E2P PharmD program goes forward the provincial government will also expect such a program to help pharmacists who want to "bridge" to the new entry-to-practice credential.

#### How were faculty members and students engaged in the program development process?

Throughout the program development process, faculty members and students have been actively engaged in a variety of ways.

- Since October 2012, virtually every Pharmaceutical Sciences Faculty meeting has had a program development update on the agenda. Many meetings and town hall events have had aspects of the program as the entire agenda.
- Faculty members, students and members of the profession are broadly represented on the Program Development Task Force and Working Groups and have been the driving force behind this proposal.
- We have hosted Student Town Hall events in March 2013 and October 2013, which were captured and are available to students for viewing. Both events were well attended by more than 150 students each.
- We have promoted the E2P PharmD Feedback website as an avenue to inform students, faculty members and interested members of the public about the new program, and to gather their feedback: http://www.pharmacy.ubc.ca/programs/e2ppharmd.
- Students have been engaged in the program development process through their representatives
  on all Working Groups and the Task Force, and students have been present at all Faculty
  meetings related to the program.

Sincerely,

Peter Loewen, B.Sc.(Pharm), ACPR, PharmD, FCSHP,

Assistant Professor & Director, Doctor of Pharmacy Programs

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# Doctor of Pharmacy (PharmD) New Program Proposal



# **Executive Summary**

# A) History, mission, and academic goals

Since 1946, the Faculty of Pharmaceutical Sciences at UBC has made a lasting difference in the health and well being of people throughout British Columbia and beyond. We have graduated over 4,000 pharmacists and pharmaceutical scientists who make outstanding contributions in the community, hospitals, government, academia, and industry. We have developed strong research capabilities and continue to close the gap in our quest to first understand disease – then conquer it – while simultaneously studying the workings of the health care system. In addition, we continue to enhance our environment for quality learning, effective communication, practical research discovery, collaboration and partnerships to transform the future of health care for the benefit of all.

Our mission is to advance knowledge, health outcomes, and the profession of pharmacy leading to enhanced societal benefit and optimal patient care.

## B) Proposed credential to be awarded

**Doctor of Pharmacy** 

Abbreviation: PharmD

Level: First Professional Degree (undergraduate)

Discipline: Pharmacy

#### C) Location

Based at the Pharmaceutical Sciences Building, University of British Columbia Vancouver Campus.

# D) Faculty offering the proposed new degree program

**Faculty of Pharmaceutical Sciences** 

#### E) Anticipated program start date

First cohort to enter the program in September 2015 (2015W Session)

# F) Anticipated completion time in years or semesters

Four (4) years

#### **G) Program Summary**

#### **Aim & Objectives of the Program**

#### Aim

To prepare pharmacists as *medication therapy experts* focused on improving their patients' health, who are competent to practice pharmacy to its full scope and adapt as this expands, and who are equipped to lead in reshaping the profession.

#### **Objectives**

- 1. To facilitate learners' attaining at least *competent*-level performance in all of the program's learning outcomes/competencies in the context of patient problems of *moderate complexity*.
- 2. To provide a solid foundation for post-graduate residencies, fellowships, and clinical M.Sc./Ph.D. programs which are designed to develop proficient-to-expert level of performance in managing moderate-to-high complexity patients/problems.

#### Anticipated contribution of the proposed program to UBC's mandate and strategic plan

The PharmD program will further UBC's Place and Promise Strategic Plan in the following ways:

#### **Student Learning**

The program embodies best-practice principles of health care curriculum design and delivery, including multiple modes of student learning (independent study, large-group, small-group, practice simulation, online, reflective

practice and experiential) chosen to best achieve the learning outcomes, and a comprehensive student assessment program. The **quality** of teaching and the **impact** of student learning will be exemplary among health programs.

As an **outcomes/competency-based curriculum**, the program will assess student achievement and level of performance in relation to the required outcomes/competencies at all stages of the program. This serves as a powerful platform for identifying students in need of additional support and a tangible metric of **student success**.

#### Research Excellence

The program has avenues for students to gain introductory **research** experience in the pharmaceutical sciences and related healthcare disciplines, including elective coursework specifically focused on these opportunities.

#### **Community Engagement**

The primary goal of the program, aligned with our Faculty's mission, is to improve health outcomes for Canadians. The program includes a substantial community service learning component.

#### **Aboriginal Engagement**

The program includes specific learning activities aimed at enhancing intercultural understanding with Aboriginal communities and unique Aboriginal health needs. The program includes interprofessional and experiential learning opportunities which directly engage and positively impact Aboriginal communities and people.

#### Alumni Engagement

The program's development, its delivery, and its continuous improvement will continue to depend upon vigorous engagement with our alumni. We have engaged our alumni in all stages of program development so far and will continue to do so.

#### International Engagement

The program offers international experiential learning opportunities in international settings, including developing countries. The program contains curricular elements designed to foster understanding of international health issues, especially those in the developing world.

#### Linkages between the learning outcomes and the curriculum design

The instructional activities and outcomes of the program are structured around:

- 1. The Association of Faculties of Pharmacy of Canada (AFPC) "Educational Outcomes for First Professional Degree Programs in Pharmacy (Entry-to-Practice Pharmacy Programs) in Canada". These educational outcomes, structured around the roles of Care Provider, Communicator, Collaborator, Manager, Advocate, Scholar, and Professional, are derived from the CanMEDS Physician Competency Framework put forth by the Royal College of Physicians. (http://www.royalcollege.ca/portal/page/portal/rc/canmeds/framework)
- The Canadian Council for Accreditation of Pharmacy Programs (CCAPP) "Standards and Guidelines for the First Professional Degree in Pharmacy Programs", which cover all aspects of curriculum design, program evaluation, and assessment. Standards 9 and 10 are explicitly linked to the AFPC Outcomes, and form the core of the program's curriculum (<a href="http://www.ccapp-accredit.ca/site/pdfs/university/CCAPP">http://www.ccapp-accredit.ca/site/pdfs/university/CCAPP</a> accredit standards degree 2012.pdf).
- 3. The National Association of Pharmacy Regulatory Authorities (NAPRA) "Competencies of Entry Level Pharmacists"

(http://napra.ca/Content Files/Files/Entry to Practice Competencies March2007 final new layout 2009.pdf)

#### **Experiential Learning**

The program will include 46 weeks of experiential learning, which meets the accreditation standards for entry-to-practice PharmD programs in Canada (CCAPP) and the United States (ACPE). Learners develop communication and technical skills, apply knowledge, and make patient care decisions based on clinical competency and professional judgement in real world work environments.

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

Graduates of the program are equipped for immediate entry to professional practice in community pharmacy settings, primary care clinics, and ambulatory care settings in health authorities.

Program graduates, depending on further training pursued, will be employed mainly in the community pharmacy, health-authority-based pharmacy (inpatient, ambulatory care, community-based), primary care clinics, government, and pharmaceutical industry sectors.

Graduates are equipped to pursue post-graduate training programs such as (but not limited to): ACPR-accredited Pharmacy Practice Residency programs; MSc and PhD programs for which an entry-level pharmacy degree suffices for admission; MBA, MPH, MHA; JD, MD, and other professional programs.

#### **Delivery methods**

The program will rely on a variety of delivery methods, including: Experiential Education; Human Patient Simulators; Interprofessional Activities; Lectures; Online or Blended approaches; Practice Labs; Self-study; and Small Groups.

#### **Program strengths**

The program will feature a state-of-the-art curriculum, integrating the spectrum of foundational pharmaceutical sciences with advanced pharmacotherapeutic problem-solving and experiential learning in classrooms, simulations, community, primary care, residential care, hospitals, interprofessional and other contexts. The program aligns with or exceeds requirements of an expanded scope of practice for pharmacy practice in British Columbia and most other Canadian provinces. The program will focus on training pharmacists who will ensure that drug therapy is safe and effective for their patients, and that their overall health is optimized.

#### Support and recognition from other post-secondary institutions and regulatory or professional bodies

The PharmD degree will be subject to accreditation in 2019 by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP). In the meantime, the 6-year accreditation granted in 2013 to our B.Sc.(Pharm) program will apply to the PharmD program. As such, the degree will be recognized as a First Professional Degree in pharmacy by all Canadian and US universities, as well as by all pharmacy licensing authorities in Canada as part of the National Model Licensing Program-Pharmacists (<a href="http://napra.ca/pages/Licensing Registration/Licensing Program.aspx">http://napra.ca/pages/Licensing Registration/Licensing Program.aspx</a>).

#### Plans for admissions and transfer within the British Columbia post-secondary education system

Students are admitted to year one of a four-year PharmD program, following two years (60 credits) of prerequisite coursework, which can be completed at any post-secondary institution, so long as their coursework transfers to the UBC equivalent of the admission requirements.

UBC offers the only entry-to-practice degree for pharmacists in British Columbia. BC students cannot transfer into the program. All students enter year one - no advanced standing is offered to any student.

#### Related Programs in the institution or other British Columbia post-secondary institutions.

The entry-to-practice PharmD will replace the entry-to-practice Bachelor of Science in Pharmacy program over a 4-year transition period. The last cohort will enter the B.Sc.(Pharm) program in September 2014 and will graduate in May 2018.

The post-graduate Doctor of Pharmacy program will be replaced by new residency and fellowship training opportunities. The last graduates are expected to exit the program prior to 2019.

## **H) Institutional Contacts**

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# **NEW PROGRAM PROPOSAL**

# DOCTOR OF PHARMACY (PharmD) DEGREE

Version date: 21 March 2014

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# Part 1 - New Program Proposal

## History, mission, and academic goals

Since 1946, the Faculty of Pharmaceutical Sciences at UBC has made a lasting difference in the health and well being of people throughout British Columbia and beyond. We have graduated over 4,000 pharmacists and pharmaceutical scientists who make outstanding contributions in the community, hospitals, government, academia, and industry. We have developed strong research capabilities and continue to close the gap in our quest to first understand disease – then conquer it – while simultaneously studying the workings of the health care system. In addition, we continue to enhance our environment for quality learning, effective communication, practical research discovery, collaboration and partnerships to transform the future of health care for the benefit of all.

Our mission is to advance knowledge, health outcomes, and the profession of pharmacy leading to enhanced societal benefit and optimal patient care.

# Proposed credential to be awarded

**Doctor of Pharmacy** 

Abbreviation: PharmD

Level: First Professional Degree

Discipline: Pharmacy

#### Location

Based at the Pharmaceutical Sciences Building, University of British Columbia Vancouver Campus.

Officially opened on September 18, 2012, the Pharmaceutical Sciences Building is a quarter-million square foot, state-of-the-art learning and research facility. Made possible by an \$86.4-million investment from the Province of BC and the generous support of donors, the new building houses for the first time under one roof all the teaching, learning, research and community outreach activities of the Faculty of Pharmaceutical Sciences.

Significant portions of the learning will also occur in patient care sites throughout BC, including community pharmacies, health authorities (inpatient and outpatient settings), long-term care facilities, and primary care clinics. The program will make use of various existing agreements we have with the many organizations involved.

When the British Columbia government funded our new facility and program expansion, it was predicated on a commitment from the Faculty that, "We will change the nature of pharmacy practice in British Columbia and beyond." Our proposed entry-to-practice PharmD program is an expression of our firm commitment to deliver on that promise and enhance the value of our contributions to the health of British Columbians and Canadians.

#### Faculty offering the proposed new degree program

**Faculty of Pharmaceutical Sciences** 

# **Anticipated program start date**

First cohort to enter the program in September 2015 (2015W Session)

# Anticipated completion time in years or semesters

Four (4) years

# **Program Summary**

#### **Rationale for the New Program**

The practice of pharmacy has become much more complex in recent years, with more drugs available than ever before and people living longer with more complex medical conditions. At the same time, patients, governments, and regulatory agencies have increased the scope of what pharmacists can and should do to care for their patients. Examples of this include giving vaccinations, doing clinical consultations with patients to optimize their medications, prescribing medications, monitoring drug therapy, adapting prescriptions, performing medication reviews, administering medications, ordering and interpreting lab tests, chronic disease management, collaborative drug therapy management, patient and health professional education, and much more interprofessional engagement. Drivers of these changes include patient demands for increased access to care, patients' preference to receive as many types of care from as many types of professionals as possible, a need for increased coordination of the health care system, and a need to deliver safe, effective healthcare while containing costs. Supported by compelling evidence that, with appropriate training, pharmacists can powerfully address all of these health system needs, and recognizing that pharmacists are the most trusted and accessible health care professionals, <sup>3,4</sup> the impetus for change over the past decade has been strong.

This means that pharmacists are taking a more prominent role in the care of their patients than ever before. As a result, different and more advanced skillsets are required of pharmacists.

In 2009, all of the organizations that represent the pharmacy profession, including pharmacist associations, pharmacy technicians, pharmacy business groups, regulatory bodies, and universities collaborated to create the "Blueprint for Pharmacy". The Blueprint outlines several goals centered on pharmacists providing "optimal drug therapy outcomes for Canadians through patient-centered care." The plan describes the responsibilities that each sector, including universities, agreed take on in order for the vision to be fulfilled.

Pharmacists training programs have tried to adapt to the increased demands of the profession, but the bachelor's degree programs that Canadian universities have traditionally offered can no longer contain the amount of learning that is required of pharmacists. The Association of Faculties of Pharmacy of Canada (AFPC) states, "the current baccalaureate professional program at Canadian pharmacy schools can no longer effectively accommodate the proposed added depth and breadth to curricular content knowledge in the pharmaceutical sciences nor provide graduates with the enhanced skills that the profession and the health care system will expect from pharmacists going forward."

A different kind of degree program, one that has more time for learning these complex skills and more time to do applied learning with real patients is needed. This type of degree, already offered in all U.S. universities beginning in the mid-1990's, is commonly called a "Doctor of Pharmacy", or PharmD, and it is classified by universities as a "Professional Doctoral Degree" similar in classification to the Doctor of Medicine. In 2010, the Association of Faculties of Pharmacy (AFPC), which includes all 10 schools of pharmacy in Canada agreed that they would switch to the PharmD degree as their entry-to-practice degree by 2020. Our program has been developed to ensure that it meets the accreditation standards set by the national accrediting body, the Canadian Council for Accreditation of Pharmacy Programs (CCAPP).

The main features of an entry-to-practice PharmD degree compared to a B.Sc. degree in pharmacy based on the U.S. and Canadian experience so far are:

- Two or more pre-pharmacy years of university coursework (vs. ~1)
- Roughly the same number of pharmacy program years (~4)
- More contact time during the program, the majority of the extra time being spent on patient care skill development in classroom, simulated, experiential, and interprofessional contexts.
- More experiential learning (approximately twice as much)

As of this writing, four of Canada's 10 pharmacy degree programs (UT, UMontreal, Laval, Waterloo) are PharmD programs, encompassing 55% of Canadian pharmacy entering students. The University of Montreal commenced its entry-to-practice (E2P) PharmD program in 2007 and produced its first graduating class in 2011. Laval University accepted its first class in 2011. In January 2013, The University of Toronto and the University of Waterloo received government approval to offer the PharmD as their E2P pharmacy degree. They have already commenced converting students who entered as early as 2011 over to the new degree and by 2015 all year levels will be enrolled in PharmD programs. UBC, Canada's 3<sup>rd</sup> largest pharmacy program, aims to be the 5<sup>th</sup> university to offer a PharmD as our E2P program. Manitoba, Alberta, Saskatchewan, Dalhousie, and Memorial are in various early stages of creating E2P PharmD programs.

These changes in the pharmacy profession, and therefore to training programs, are occurring worldwide. The 2013 International Pharmacy Federation Global Education Report asserts that, "....[pharmacy] undergraduate students must be taught with new methodologies to help them adapt to real life problems in a comprehensive and multi-disciplinary way". It outlines "...a global trend towards more integrated clinical curricula with more patient focused, experiential learning in practice or virtual environments. This had been accompanied by a move away from an emphasis on pharmaceutical science and the development of separate pharmaceutical science degrees." It also identifies that, "... case-based learning and experiential education... is beginning to be even more prominent as evidence grows that active learning and student engagement are critical to the professional development of lifelong learners. Simulation... especially as part of interprofessional education, will be increasingly important in the PharmD curriculum." Our program embodies all of these features and many more.

UBC is one of the top Universities in the world and UBC's Faculty of Pharmaceutical Sciences is one of the top pharmacy schools in Canada. <sup>15</sup> UBC was the first Canadian university to offer a post-graduate PharmD program in 1991, and many of the 144 graduates of that program are professional leaders in Canada and internationally. In fact, graduates of UBC's post-graduate PharmD program (8 per year), one of only two in Canada, have synergized the expansion of advanced-practice pharmacy patient care and growth of academic clinical pharmacy in Canada. We at UBC are well recognized as having the expertise to educate students at a professional doctoral level in pharmacy.

UBC's post-graduate PharmD program is designed to train outstanding BSc trained pharmacists to fulfill advanced practice roles. In the future, the opportunity to acquire the knowledge required for advanced practice roles will be through training opportunities currently in development, such as a post-graduate residency program over two years (PGY1 and PGY2), instead of the current one-year residency opportunities (PGY1). The entry requirements, program duration, class size, depth and individualization of training and expected level of proficiency of the post-graduate PharmD differ from what is proposed for the entry-to-practice PharmD. The new E2P program will prepare students to enter the practice of pharmacy.

As the PGY2 residency standards are developed and adopted, we anticipate the applicant pool for UBC's post-graduate PharmD will shrink and eventually, we will cease offering this program.

Since the 1970's, BC has been considered a Canadian centre of advanced pharmacy practice and innovation, particularly in hospitals. BC has an unparalleled cadre of pharmacists in an array of specialized and general practice roles to educate our students.

To ensure that patients in BC are cared for by pharmacists who are providing high quality care to the full scope allowed by legislation and regulation, UBC is creating an entry-to-practice PharmD program which will begin training the pharmacists of the future in 2015, with the first graduates in May 2019.

Our entry-to-practice PharmD graduates will truly be medication experts who care about improving their patients' health, who are competent to practice contemporary pharmacy to its full scope and adaptable as this expands, and who are equipped to lead the profession in the directions it needs to go for the good of all British Columbians.

#### **Features of the New Program**

- 2 years of pre-program coursework. ~60% of our current students have 2 or more years of pre-pharmacy coursework, and ~30% have a prior degree
- 4 program years (PY1, PY2, PY3 and PY4) leading to a professional doctoral degree
- Approximately 20% more credit hours than the B.Sc.(Pharm) program, and 40% more pharmacy-specific credit hours
- In PY1-PY3, ~75% of the coursework will focus on **Medication Management** (page 16) organized and delivered in modified body-system-based modules that, for each condition, integrate the essential elements of patient care skills for pharmacists:
  - epidemiology
  - pathophysiology
  - patient assessment (interview, physical, laboratory, diagnosis)
  - severity assessment / staging
  - professional identity & role, interprofessional education
  - therapy:
    - o non-pharmacologic approaches
    - o biomolecular/medicinal chemistry
    - o drug delivery (pharmaceutics)
    - o pharmacology
    - o pharmacokinetics
    - o evidence appraisal
    - o patient preferences and special populations
    - evaluating, implementing, monitoring and modifying pharmacotherapy based on patient needs
- Integration Activities coursework in PY1-PY3 to reinforce and recontextualize knowledge and skills in increasingly complex patient situations
- An explicit focus on escalating the complexity of patient cases and patient problems students must manage as year levels progress
- A focus on health problems affecting British Columbians, Canadians, Aboriginal peoples, and a solid grounding in international health issues
- **Competency-based** learning outcomes within the 7 pharmacist roles defined by current accreditation standards (Figure 2: AFPC Roles and Learning Outcomes)
- Alignment of learning outcomes/competencies, teaching/learning activities, and assessment methods.

- Experiential learning in all program years, including 24 weeks of Advanced Pharmacy Practice Experiences (APPE) in PY4, for 46 weeks total. Includes service learning, interprofessional education, and practicums in community, primary care, residential care, hospitals, primary care clinics, and the UBC Pharmacist's Clinic
- **Elective learning** in PY3 & PY4, which are focused collections of elective courses and clerkships. These will include pharmacy practice, pharmaceutical sciences, and practice management.
- Aligns with the system of post-graduate pharmacy training in Canada, including preparing
  graduates to continue their training in Pharmacy Practice Residency Programs (accredited PGY1,
  and soon-to-be-created PGY2 programs), fellowships, and MSc/PhD
- Eventually, combined degree programs will be offered. These may include PharmD/MBA, PharmD/MSc, PharmD/PhD, PharmD/JD, and/or PharmD/MPH

This new curriculum will meet the criteria to be called a professional doctoral degree: a Doctor of Pharmacy, abbreviated PharmD.

#### **Aim & Objectives of the Program**

#### Aim

To prepare pharmacists as *medication therapy experts* focused on improving their patients' health, who are competent to practice pharmacy to its full scope and adapt as this expands, and who are equipped to lead in reshaping the profession.

#### **Objectives**

- 1. To facilitate learners' attaining at least *competent*-level performance in all of the program's learning outcomes/competencies in the context of patient problems of *moderate complexity*. This corresponds with the *relational* level in the Structure of Observed Learning Outcomes (SOLO) taxonomy of learning, <sup>16</sup> applying (executing, implementing) level in Bloom's revised taxonomy, <sup>17</sup> and *competent* level in the framework described by Batalden et al. <sup>18</sup> Expert-level performance is developed in post-graduate training opportunities such as Pharmacy Practice Residencies and Fellowships.
- 2. To provide a solid foundation for post-graduate residencies, fellowships, and clinical M.Sc./Ph.D. programs which are designed to develop proficient-to-expert level of performance in managing moderate-to-high complexity patients/problems.

#### Anticipated contribution of the proposed program to UBC's mandate and strategic plan

The PharmD program will further UBC's Place and Promise Strategic Plan in the following ways:

#### **Student Learning**

- The program embodies best-practice principles of health care curriculum design and delivery, including
  multiple modes of student learning (independent study, large-group, small-group, practice simulation,
  online, reflective practice and experiential) chosen to best achieve the learning outcomes, and a
  comprehensive student assessment program. The quality of teaching and the impact of student
  learning will be exemplary among health programs.
- As an **outcomes/competency-based curriculum**, the program will assess student achievement and level of performance in relation to the required outcomes/competencies at all stages of the program.

This serves as a powerful platform for identifying students in need of additional support and a tangible metric of **student success**.

The program has a total of 46 weeks of required experiential learning. This will occur in settings ranging
from community service learning to inpatient acute care, and many settings between where
interprofessional teams care for clients with healthcare needs. We have linkages with experiential
learning sites in Africa, Europe, the Middle East, and the United States to offer international learning
experiences.

#### **Research Excellence**

- The program has avenues for students to gain introductory research experience in the pharmaceutical sciences and related healthcare disciplines, including elective coursework specifically focused on these opportunities.
- The program was developed using evidence-based best-practice concepts for healthcare programs, and the curriculum incorporates cutting-edge content generated by our faculty to connect students with the process and benefits of scholarship and research.

#### **Community Engagement**

- The primary goal of the program, aligned with our Faculty's mission, is to improve health outcomes for Canadians.
- The program will include a substantial community service learning component.
- We will equip our students to engage in lifelong learning and reflective practice as is the hallmarks of all outstanding professionals.
- The program development process extensively engaged the pharmacy practice community.
- Delivery of the program will require significant contributions by practicing pharmacists and other members of interprofessional care teams.

#### **Aboriginal Engagement**

- The program includes specific learning activities aimed at enhancing intercultural understanding with Aboriginal communities and unique Aboriginal health needs.
- The program includes interprofessional and experiential learning opportunities which directly engage and positively impact Aboriginal communities and people.
- The program encourages aboriginal students to apply for admission, and will grant admission to applicants who meet the Faculty's admission requirements.

## **Alumni Engagement**

- The program's development, its delivery, and its continuous improvement will continue to depend upon vigorous engagement with our alumni. We have engaged our alumni in all stages of program development so far and will continue to do so.
- A partner program we are creating, the UBC Flexible Doctor of Pharmacy program is specifically
  designed to meet the professional development needs of practicing pharmacists, a significant majority
  of whom in BC are our alumni.

#### **International Engagement**

• The program offers international experiential learning opportunities in international settings, including developing countries.

• The program contains curricular elements designed to foster understanding of international health issues, especially those in the developing world.

#### Linkages between the learning outcomes and the curriculum design

In all respects, the program is designed to achieve alignment as follows (Figure 1: Curricular Alignment):

Figure 1: Curricular Alignment



The instructional activities and outcomes of the program are structured around:

- The Association of Faculties of Pharmacy of Canada (AFPC) "Educational Outcomes for First
  Professional Degree Programs in Pharmacy (Entry-to-Practice Pharmacy Programs) in Canada".
   These educational outcomes are derived from the CanMEDS Physician Competency Framework put forth by the Royal College of Physicians.
   (http://www.royalcollege.ca/portal/page/portal/rc/canmeds/framework)
- The Canadian Council for Accreditation of Pharmacy Programs (CCAPP) "Standards and Guidelines for the First Professional Degree in Pharmacy Programs", which cover all aspects of curriculum design, program evaluation, and assessment. Standards 9 and 10 are explicitly linked to the AFPC Outcomes, and form the core of the program's curriculum (<a href="http://www.ccapp-accredit.ca/site/pdfs/university/CCAPP">http://www.ccapp-accredit.ca/site/pdfs/university/CCAPP</a> accred standards degree 2012.pdf).
- The National Association of Pharmacy Regulatory Authorities (NAPRA) "Competencies of Entry Level Pharmacists"
   (http://napra.ca/Content Files/Files/Entry to Practice Competencies March2007 final new layo ut 2009.pdf)

The Learning Outcomes for the program are structured around the following 7 Roles (Figure 2):

Figure 2: AFPC Roles and Learning Outcomes.



AFPC | www.afpc.info

#### **Experiential Learning**

The program will include 46 weeks of experiential learning, which meets the accreditation standards for entry-to-practice PharmD programs in Canada (CCAPP) and the United States (ACPE).

Our program provides students with 6 weeks of experiential learning in the first professional year (PY1), 8 weeks in each of the second and third professional years (PY2 and PY3), and 24 weeks in the fourth professional year (PY4). Learners develop communication and technical skills, apply knowledge, and make patient care decisions based on clinical competency and professional judgement in real world work environments. In years PY1, PY2 and PY3 clerkships are Introductory Pharmacy Practice Experiences (IPPE), while in PY4 the experience is an Advanced Pharmacy Practice Experience (APPE).

More detail about the Experiential Learning program is provided in Part 2 (page 24).

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

Graduates of the program are equipped for immediate entry to professional practice in community pharmacy settings, primary care clinics, and ambulatory care settings in health authorities.

Program graduates, depending on further training pursued, will be employed mainly in the following sectors:

- Community pharmacy
- Health-authority-based pharmacy (inpatient, ambulatory care, community-based)
- Primary care clinics
- Government
- Pharmaceutical industry

Graduates are equipped to pursue post-graduate training programs such as (but not limited to):

- ACPR-accredited Pharmacy Practice Residency programs
- MSc and PhD programs for which an entry-level pharmacy degree suffices for admission
- MBA, MPH, MHA
- JD, MD, and other professional programs

#### **Delivery methods**

The program will rely on a variety of delivery methods, including:

- Experiential Education
- Human Patient Simulators
- Interprofessional Activities
- Lectures
- Online or Blended approaches
- Practice Labs
- Self-study
- Small Groups

#### **Program strengths & facilitators**

The program will feature a state-of-the-art curriculum, integrating the spectrum of foundational pharmaceutical sciences with advanced pharmacotherapeutic problem-solving and experiential learning in classrooms, simulations, community, primary care, residential care, hospitals, interprofessional and other contexts. The program aligns with or exceeds requirements of an expanded scope of practice for pharmacy

practice in British Columbia and most other Canadian provinces. The program will focus on training pharmacists who will ensure that drug therapy is safe and effective for their patients, and that their overall health is optimized.

The program will benefit from the following unique strengths of our Faculty:

- We have delivered a post-graduate PharmD program since 1991, which has produced over 140 graduates who have become the vanguard of advanced pharmacy practice across Canada and elsewhere.
- We have a critical mass of advanced practice pharmacists in BC many of whom are faculty resources for our program. As such, UBC is uniquely positioned among Canadian universities to deliver this program at a world-class level.
- We have a brand new M\$133 building in which to train our students.
- We have funding support to expand our faculty with the appropriate faculty and staff to deliver the program.
- We have longstanding and continuously enhanced collaborations with our community and healthauthority partners to deliver classroom and experiential teaching.
- We are soon opening a first-in-Canada Pharmacists Clinic where our students can learn while patients receive care delivered by expert pharmacists.
- The UBC Integration of Health initiative will enhance the ability to provide interprofessional experiences to pharmacy students as they work alongside students in medicine, dentistry, nursing other health professions.

Environmental facilitators of our new program include:

- Legislative and regulatory (scope of practice) changes in BC and other provinces provide a strong impetus for the new curriculum.
- Expansion of integrated health teams, evolving community practice models, and expanding primary
  care roles for pharmacists in BC and other provinces provide impetus and opportunity for new skills
  we will deliver to be applied in practice.
- Curricular features and learning outcomes of our new program have been developed to meet updated accreditation standards.
- Licensing competencies will continue to evolve in alignment with the enhanced skills our students will acquire in the program.

# Support and recognition from other post-secondary institutions and regulatory or professional bodies

The PharmD degree will be subject to accreditation in 2019 by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP). In the meantime, the 6-year accreditation granted in 2013 to our B.Sc.(Pharm) program will apply to the PharmD program. As such, the degree will be recognized as a First Professional Degree in pharmacy by all Canadian and US universities, as well as by all pharmacy licensing authorities in Canada as part of the National Model Licensing Program-Pharmacists (http://napra.ca/pages/Licensing Registration/Licensing Program.aspx)

#### Plans for admissions and transfer within the British Columbia post-secondary education system

Students are admitted to year one of a four-year PharmD program, following two years (60 credits) of prerequisite coursework.

Students may complete the two years of prerequisite coursework at any post-secondary institution, so long as their coursework transfers to the UBC equivalent of the admission requirements. We have made every effort to ensure that our listed prerequisites are widely obtainable.

UBC offers the only entry-to-practice degree for pharmacists in British Columbia. BC students cannot transfer into the program. All students enter year one - no advanced standing is offered to any student.

#### Related Programs in the institution or other British Columbia post-secondary institutions.

The entry-to-practice PharmD will replace the entry-to-practice Bachelor of Science in Pharmacy program over a 4-year transition period. The last cohort will enter the B.Sc.(Pharm) program in September 2014 and will graduate in May 2018.

The post-graduate Doctor of Pharmacy program will be replaced by new residency and fellowship training opportunities. The last graduates are expected to exit the program prior to 2019.

#### Institutional contact people

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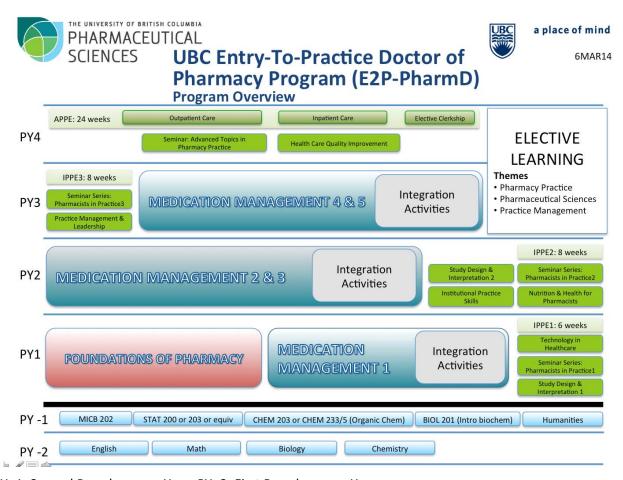
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# Part 2 - Documentation used in the Faculty's internal program approval process

# **Program Overview**

Figure 3: Program Overview



PY -1: Second Pre-pharmacy Year, PY -2: First Pre-pharmacy Year

IPPE: Introductory Pharmacy Practice Experience APPE: Advanced Pharmacy Practice Experience

# **New Courses**

The following table (Figure 4) lays out the planned courses from Professional Year 1 through 4.

**Figure 4: Courses and Credits** 

Course Title	Subj Code	Number	Cr	Т1	T 2	Sum mer	Experiential Weeks
Professional Year 1 (PY1)							
Foundations of Pharmacy	PHRM	100	18	Υ			
Medication Management I	PHRM	111	15		Υ		
Technology in Healthcare	PHRM	161	2		Υ		
Study Design & Interpretation I	PHRM	131	2		Υ		
Seminar: Pharmacists in Practice I	PHRM	141	2	Υ	Υ		
Introductory Pharmacy Practice Experience I	PHRM	171	3	Υ	Υ	Υ	6
IPE Activities during Non-instructional Day	UBC IPE Passport			Υ	Υ		
	Total credits:		42				
Professional Year 2 (PY2)							
Medication Management II	PHRM	211	15	Υ			
Medication Management III	PHRM	212	15		Υ		
Nutrition for Pharmacists	PHRM	221	3	Υ	Υ		
Study Design & Interpretation II	PHRM	231	2	Υ	Υ		
Seminar: Pharmacists in Practice II	PHRM	241	2	Υ	Υ		
Institutional Practice Skills	PHRM	251	1	Υ			
Introductory Pharmacy Practice Experience II	PHRM	271	4	Υ	Υ	Υ	8
IPE Activities during Non-instructional Day	UBC IPE Passport			Υ	Υ		
·	Total credits:		42				
Professional Year 3 (PY3)							
Medication Management IV	PHRM	311	12	Υ			
Medication Management V	PHRM	312	12		Υ		
Seminar: Pharmacists in Practice III	PHRM	341	2	Υ	Υ		
Practice Management & Leadership	PHRM	351	3	Υ			
Introductory Pharmacy Practice Experience III	PHRM	371	4			Υ	8
Elective Learning	multiple	multiple	9	Υ	Υ		
IPE Activities during Non-instructional Day	UBC IPE Passport	•		Υ	Υ		
	Total credits:		42				
rofessional Year 4 (PY4)							
Outpatient Advanced Pharmacy Practice Experience	PHRM	471	16	Υ	Υ		12
Inpatient Advanced Pharmacy Practice Experience	PHRM	472	10	Υ	Υ		8
Selected Advanced Pharmacy Practice Experience	PHRM	473	5	Υ	Υ		4
Seminar: Advanced Topics in Pharmacy Practice	PHRM	441	1		Υ		
Healthcare Quality Improvement	PHRM	481	2		Y		
Elective Learning	PHRM	45x	6	Υ	Y		
	Total credits:	.57.	40	·			46
	TOTAL:		166				

# Contact Hours & Scheduling in PY1, PY2, PY3

Students will spend approximately 27 hours per week, spread over four days, on structured learning activities. These are described as "classroom" hours, but they will occur in a variety of contexts besides typical classrooms (e.g., practice simulations, discussion groups, etc.). This model allows for one of the four days to have no classes during half the day. The remaining weekday will be a non-instructional-day (p.27)

during which students will spend approximately 5 hours on interprofessional, experiential, and/or service learning. While rigorous, we believe this to be a reasonable schedule template allowing for sufficient out-of-class study & reflection, while incorporating the important non-instructional day.

Figure 5: Representative week schedule in PY2. Blue = Medication Management; Yellow = Integration Activities; Orange = Non-Instructional Day; Green = Other Courses.

	M	T	W	Th	F
0800h					
0900h					
1000h					
1100h					
1200h					
1300h					
1400h					
1500h					
1600h					
1700h					

# **Foundations of Pharmacy Curriculum**

The Foundations of Pharmacy course (PHRM 100) comprises the majority (over 80%) of the first term PY1 curriculum. The course provides an introduction to the pharmaceutical sciences and pharmacy practice, which will be further developed in subsequent medication management modules.

Contemporary pharmacy practice requires the integration of information derived from a number of foundational basic and pharmaceutical sciences. With the patient as the central focus, there is a need for a fundamental understanding and knowledge of the structure and function of systems in the body, as well as specific knowledge of drugs and their effects. The AFPC 2010 Educational Outcomes document states "pharmacy graduates require a strong foundation in the biomedical, pharmaceutical, behavioural, social and administrative pharmacy sciences in order to achieve the required educational outcomes". The Blueprint for Pharmacy (<a href="http://www.pharmacists.ca/">http://www.pharmacists.ca/</a>) reinforces the need to educate the contemporary pharmacists as a "medication expert" and a "medication therapy expert", in order to provide "optimal drug therapy outcomes for Canadians through patient-centered care". The ability to integrate knowledge from basic, pharmaceutical and clinical sciences is key to the provision of safe and effective patient care.

The basic sciences describe the structure and function of the body, organ systems and how their functions interrelate. The basic sciences include anatomy, physiology, biochemistry, molecular and cellular biology, and pathophysiology.

Possessing specialized knowledge of the pharmaceutical sciences differentiates pharmacists from other healthcare professionals. The knowledge of drugs, drug products and the actions of drugs in the body is rooted in the pharmaceutical sciences of medicinal chemistry, pharmaceutics, pharmacokinetics, pharmacogenomics and pharmacology.

Pharmacists in practice are required to integrate knowledge from basic and pharmaceutical sciences with the clinical sciences, and to effectively communicate this information to patients and other healthcare professionals. This requires knowledge of epidemiology and critical appraisal as well as medication management skills that include professional communication, clinical patient assessment and interprofessional collaboration. As regulated healthcare professionals, pharmacists must also supervise the safe distribution of medications and adhere to the bylaws and regulations that govern pharmacy practice.

The content of the Foundations of Pharmacy course will focus on the core concepts that form the basis of broad frameworks and schema as they relate to identifying and solving drug therapy problems. The primary elements described in Foundations of Pharmacy include:

- Structure and function of organ systems and how their functions are interrelated.
- How body and organ function are affected by factors such as age, sex, and genetics/genomics and the transition from normal organ function to disease.
- How psychosocial, cultural, gender and economic factors affect drug therapy, the patient and society.
- Principles of drug development and medicinal chemistry and how the chemical properties of drugs affect their behavior in the body.
- Principles of pharmacology and pharmacodynamics, how drugs act on receptors and the resulting effect on organs and the body.
- Principles of pharmaceutics, the formulation of dosage forms and the stability of drugs and drug products.
- Principles of pharmacokinetics, what happens to a drug in the body with respect to absorption, distribution, metabolism and excretion and principles of pharmacogenomics.
- Principles of epidemiology, how drugs and diseases affect Canadians, how the optimal and cost effective therapies are chosen, evidence based decision making and critical appraisal of literature.
- The role of the pharmacist in the healthcare team, socialization and professional identity, patient assessment and monitoring, communication skills and drug distribution.
- Principles of scientific thinking and experimental design, critical thinking and writing, self-directed learning skills.

#### **Modules**

The Foundations of Pharmacy course comprises 7 modules:

- Pharmaceutics/Drug Delivery
- Medicinal and Biomolecular Chemistry
- Pharmacology
- Pharmacokinetics/Pharmacogenomics
- Anatomy/Physiology/Pathology
- Epidemiology and Critical Appraisal
- Medication Management

#### **Integration Activities (IA)**

Integration Activities include Labs, Tutorials and Flex Activities. Approximately 25% of the Foundations of Pharmacy course time will be devoted to Integration Activities.

The overall goal of IA is to facilitate learning in the context of scenarios that incorporate concepts and content across multiple modules. These will include laboratory activities that reinforce communication and patient assessment skills, tutorials that incorporate small group learning on topics such as interpretation of

laboratory values and physical assessment, and Flex activities that bridge knowledge between basic, pharmaceutical and clinical sciences.

The objectives of Integration Activities are:

- 1. To **integrate** foundational knowledge across multiple modules.
- 2. To apply knowledge to introductory patient care scenarios in various **contexts** (e.g. population based or primary health care settings) while considering cultural and interprofessional issues).
- 3. To develop a sequence of increasingly complex problems to allow the student to **progress** to the next module or next year level and to establish acceptable levels of performance.
- 4. To provide a forum for **reflection** and active and authentic problem-solving.
- 5. To provide opportunities for authentic forms of assessment to occur.

# **Medication Management Curriculum**

Five Medication Management courses comprise roughly 75% of the PY1, PY2, and PY3 curriculum. Each Medication Management course has two main components: **Modules**, and **Integration Activities**.

Medication Management is defined by the Blueprint for Pharmacy in collaboration with ISMP Canada, CPhA, CSHP, CACDS, AFPC, and NAPRA as "patient-centred care to optimize safe, effective and appropriate drug therapy. Care is provided through collaboration with patients and their health care teams." Pharmacists' Roles in medication management include:

- Assess patients and their medication-related needs and identify actual or potential drug therapy problems
- Formulate and implement care plans to prevent and/or resolve drug therapy problems
- Recommend, adapt or initiate drug therapy where appropriate
- Monitor, evaluate and document patients' response to therapy
- Collaborate and communicate with other health care providers, in partnership with patients

These core responsibilities of pharmacists demand sophisticated knowledge of complex scientific, clinical, and social concepts and their accompanying skillsets. Fulfilling these roles requires knowledge of the following elements of each medical condition encountered by pharmacists in the course of caring for patients:

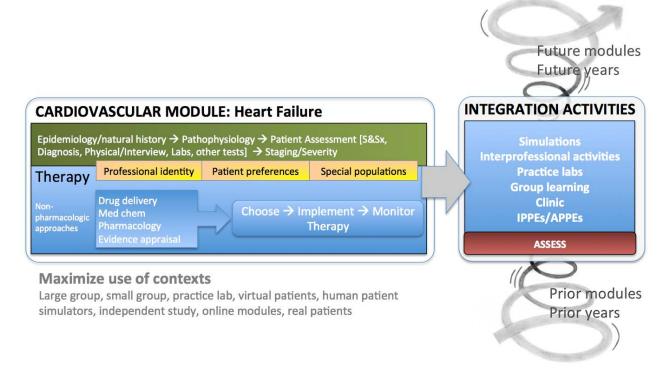
#### **Elements of a Medication Management Module**

- epidemiology
- pathophysiology
- patient assessment (interview, physical, laboratory, diagnosis)
- severity assessment / staging
- professional identity & role, interprofessional education
- therapy:
  - o non-pharmacologic approaches
  - o biomolecular/medicinal chemistry
  - o drug delivery (pharmaceutics)
  - o pharmacology
  - o pharmacokinetics
  - o evidence appraisal

<sup>&</sup>lt;sup>1</sup> http://blueprintforpharmacy.ca/resources/resource-article/2012/12/10/medication-management-definition

- o patient preferences and special populations
- evaluating, implementing, monitoring and modifying pharmacotherapy based on patient needs

Figure 6: Anatomy of a Medication Management Module



The Medication Management courses are designed to integrate learning of these elements for each condition covered in the curriculum such that, through carefully designed case-based learning activities, students attain the learning outcomes and competencies for each course in a manner that integrates the pharmaceutical sciences with clinical science, critical thinking, interprofessionalism, and individualization of patient care.

#### **Modules**

#### **Figure 7: Medication Management Modules**

The Medication Management courses contain a total of 17 modules. The modules are a modified body systems-based approach to organizing the material. All of the modules represent a body system, except Intro to Infectious Diseases, Special Topics in Infectious Diseases, Oncology/Palliative Care, and Toxicology, which are not body systems, but are most logically addressed as modules.

Within each module multiple conditions will be addressed. These conditions are chosen based on: (1) being amenable to pharmacotherapy, (2) affecting British Columbians, Canadians, and Aboriginal peoples, and (3) being encountered by pharmacists in community, primary care, ambulatory care contexts primarily, and in inpatient contexts secondarily.

- 1. Intro to Infectious Diseases
- 2. Musculoskeletal disorders
- 3. Dermatology
- 4. Eyes, Ears, Nose, Throat Disorders
- 5. Hematology
- 6. Fluid & Electrolytes
- 7. Respirology
- 8. Cardiovascular disorders
- 9. Nephrology
- 10. Endocrinology
- 11. Neurology
- 12. Psychiatry
- 13. Gastroenterology
- 14. Ob/Gyn, Sexual Health, GU disorders
- 15. Special Topics in Infectious Diseases
- 16. Toxicology
- 17. Oncology/Palliative Care

#### Sequence, year, and hours per module

The number Medication Management contact hours per week varies somewhat across PY1, PY2, and PY3 because the number of other courses in each year varies (Figure 3). Hence, a standardized block system for defining how much time is devoted to each module is used. One Block is defined as 20 hours of contact time, which coincides with 1 week of Medication Management in PY2. Hence, in PY2 there are 13 blocks per term. In PY1 there are 13 blocks in Term2; in PY3 there are 10 blocks per term to allow curricular space for elective courses.

Figure 8: Medical conditions covered within modules

The sequence of the modules is designed to impart clinical skills applicable in PY1 experiential contexts first (e.g., managing sprains and other soft tissue injuries), and progress to modules generally demanding more background knowledge or with more complex conditions (e.g., Oncology/Palliative Care). There is no clear hierarchy for many of the modules otherwise, and they will be sequenced pragmatically. Furthermore, this course structure allows year-over-year adjustments to the sequence and duration of modules within a course. Moving modules between years would be more complex, but possible.

# Medical conditions within modules

Figure 8: Medical conditions covered within modules

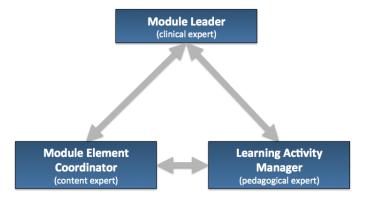
Module	Medical conditions covered	Year/ Term	Contact Hrs
Intro to ID	Mechanisms of action of antibiotics, medicinal chemistry of antibiotics, susceptibility, spectrum of activity of antibacterials, antifungals, antivirals, immunizations, pharmacodynamics, kinetics of antibiotics. Uses cases from prototypical infectious diseases (e.g., urinary tract infections, pneumonia)	PHRM 111 PY1 T2	80
Musculo-skeletal disorders	Osteoarthritis, rheumatoid arthritis, juvenile rheumatoid arthritis, soft tissue injury, septic joint, osteomyelitis, gout, back pain	PHRM 111 PY1 T2	60
Dermatology	Infections (bacterial, viral, fungal), psoriasis, eczema, drug eruptions, sunburn, acne	PHRM 111 PY1 T2	20
Fluid & Electrolytes	Sodium/water, potassium, magnesium, phosphate, calcium derangements	PHRM 111 PY1 T2	20
EENT Disorders	Glaucoma, eye infections, dry eyes, otitis media, allergic rhinitis, pharyngitis, sinusitis	PHRM 111 PY1 T2	40
Hematology	Anemia, bacteremia, bleeding disorders (congenital, drug-induced)	PHRM 111 PY1 T2	40
Respirology	Acid/base, community-acquired pneumonia & complications, chronic obstructive pulmonary disease, asthma, smoking cessation, cystic fibrosis, obstructive sleep apnea, pertussis, influenza, hospital-acquired pneumonia,	PHRM 211 PY2 T1	100

	acute bronchitis/acute exacerbation of chronic bronchitis		
Cardiovascular disorders	Risk estimation, ECG interpretation, acute coronary syndrome, chronic angina, heart failure, stroke, hypertension, lipids, atrial fibrillation, ventricular arrhythmias, advanced cardiovascular life support, venous thromboembolism, cardiotoxicology, congenital heart disease, hemodynamic support, endocarditis	PHRM 211 PY2 T1	160
Nephrology	Drug effects on renal function (nephrotoxicology), drug dosing in renal dysfunction, acute kidney injury, chronic renal failure, acute tubular necrosis, interstitial nephritis	PHRM 212 PY2 T2	60
Endocrinology	Diabetes (type 1, type 2, diabetic emergencies), hyper/hypothyroidism, osteoporosis, menopause, adrenal disorders	PHRM 212 PY2 T2	100
Neurology	Seizure disorders, stroke, meningitis, pain (acute/chronic, neuropathic), multiple sclerosis, headache, Parkinson's disease	PHRM 212 PY2 T2	100
Psychiatry	Dementia, depression, anxiety, schizophrenia, bipolar disorder, delirium, insomnia, attention deficit hyperactivity disorder, eating disorders	PHRM 311 PY3 T1	80
Gastro- enterology	Inflammatory bowel diseases, gastroenteritis, gastro esophageal reflux disease, peptic ulcer disease/NSAID gastropathy, nausea & vomiting, dyspepsia, cirrhosis & complications, intra-abdominal infections	PHRM 311 PY3 T1	60
Ob/Gyn/Sexual health/GU	Drugs & pregnancy/lactation, contraception, erectile dysfunction, urinary tract infections, incontinence, vaginal infections, sexually transmitted infections	PHRM 311 PY3 T1	60
Special Infectious Diseases	Viral hepatitis, tuberculosis, immunocompromised host infections, HIV, immunization, tropical diseases, parasitic infections	PHRM 312 PY3 T2	60
Toxicology	General approach to poisoned patient, overdose	PHRM 312 PY3 T2	40
Oncology/ Palliative Care	Including pediatric oncology	PHRM 312 PY3 T2	100

#### **Module administration**

With so many elements encompassing so many disciplines, planning and delivery of Medication Management modules will require the expertise of several people and extensive interactions between them to plan: which topics will be covered, in what sequence, to what extent, time allocation per medical condition, time allocation to each element depending on the condition and its complexity and pharmacotherapy, and optimal learning activities and contexts (e.g., lecture, small group, online, reading, simulation), the cases students encounter so as to integrate the elements in patient situations as much as possible. Educators will collaboratively and thoughtfully determine for a given medical condition whether some elements do not need to be covered at all (e.g., medicinal chemistry, because it has been covered in a previous module, or pharmaceutics because there are no special drug delivery issues for the disease) and the appropriate balance of time between elements so as to most effectively impart patient management skills within the available time. Managing this complexity requires a well-organized system with clear roles & responsibilities, as follows:

Figure 9: Key faculty for each Medication Management module



#### **Program Director**

In conjunction with the Associate Dean, Academic, the Program Director has overall responsibility for the effective delivery of the program, including the five Medication Management courses.

#### **MODULE LEADER**

**IDENTITY:** A clinical expert in the associated area of practice. One leader per module. Modules greater than 4 blocks (e.g., Cardiovascular, Neurology) may be co-led.

**ROLE:** Overall responsibility for the module.

#### **RESPONSIBILITIES:**

- Determines time allotted per topic
- Contributes to decision-making about Foundations of Pharmacy content
- Consults with Element Coordinators/Activity Managers re: pedagogical approach to the element
- Identifies relevant content & instructors
- Teaches
- Maintains and reinforces content links to AFPC outcomes & Level of Competence
- Collaborates with Director of Assessment
- Responsible for ongoing QA/QI for the module including evaluating, identifying improvement opportunities, and implementing them

#### **ELEMENT COORDINATOR**

**IDENTITY:** An expert in the content of the associated element (e.g., medicinal chemistry). One person per element (see "Elements of a Medication Management Module" above). Some elements may be grouped.

**ROLE:** Overall responsibility for the pedagogical approach to their element across all the modules.

#### **RESPONSIBILITIES:**

- In conjunction with the Module Leader & Activity Managers, determines appropriate content and approaches to learning their element
- Identifies relevant content & instructors

- Contributes to decision-making about Foundations of Pharmacy content
- Teaches
- Maintains and reinforces content links to AFPC outcomes & Level of Competence
- Collaborates with Director of Assessment
- Responsible for the QA/QI for their element across the modules, including evaluating, identifying improvement opportunities, and implementing them

#### **ACTIVITY MANAGER**

**IDENTITY:** A pedagogical expert skilled in choosing, planning, and delivering excellent learning experiences in particular contexts

**ROLE:** Overall responsibility for the effective use of their learning context(s) across all modules. One per learning context. Some contexts may be grouped.

#### **RESPONSIBILITIES:**

- In conjunction with the Module Leader & Element Coordinators, chooses, designs, and delivers appropriate learning activities for the content
- Teaches
- Responsible for the QA/QI of the learning context including evaluating, identifying improvement opportunities, and implementing them
- Potential learning contexts include Lectures, Self-study, Practice Labs, On-line, Small Groups, Human Patient Simulators, Interprofessional, Assessment, Experiential
- Collaborates with Director of Assessment

#### **Integration Activities**

The other major component of the Medication Management courses is Integration Activities (IA). Approximately 25% of the Medication Management course time will be devoted to IA.

The overall goal of IA is to facilitate learning in the context of patients with multiple disease states and drug therapy issues.

#### The objectives are:

- 1. To **integrate** knowledge of individual medical conditions with that of other previously encountered conditions in the context of patient cases.
- 2. To deepen knowledge and increase competence by repeatedly encountering similar problems in different **contexts** (e.g., manifestations, populations, health care settings, interactions with other conditions, cultural considerations, interprofessional issues, etc.)
- 3. To foster a **progression** through the year levels in terms of complexity of problems which can be solved and the level of performance in doing so.
- 4. To provide a forum for reflection and active authentic problem-solving
- 5. To provide time for authentic forms of assessment (e.g., clinical competency assessment) to occur.

#### **IA** administration

Each year-level or Medication Management course's IA will be led by one or more Integration Activities Coordinators.

#### IA COORDINATOR

**IDENTITY:** A clinical and pedagogical expert pedagogical expert skilled in leading case-based learning activities which integrate multiple clinical issues and elements of Medication Management

**ROLE:** Overall responsibility for the Integration Activities component of Medication Management for their year level/course.

#### **RESPONSIBILITIES:**

- Coordinates vertical and horizontal integration of Medication Management content within patient cases through
  - Simulations
  - Interprofessional activities
  - Practice labs
  - Group learning
  - Clinic
  - IPPEs/APPEs
- Liaises with the Program Director to ensure vertical integration of Medication Management across year levels and with progressive complexity and level of performance required
- Liaises with Module Leaders, Activity Managers, Element Coordinators to create and deliver cases
- Designs and delivers cases tuned to specified level of complexity for the corresponding Medication Management course.
- Liaises with Director of Educational Assessment to design & conduct assessments tuned to level of performance specified within AFPC role for year level.

#### **Experiential Learning Curriculum**

Experiential education is a methodology in which educators purposefully engage students in direct experience and targeted reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities.<sup>2</sup>

The experiential component of the PharmD program will increase to 46 weeks from 20 weeks required in the B.Sc.(Pharm). This increase is necessary to help prepare students for the current practice environment as well as their anticipated future practice and enhanced role in health care. The clerkship experiences will be completed in a variety of inpatient and outpatient clinical settings (e.g. clinics, residential care, LTC facilities, acute care hospitals, community pharmacies, home health care management).

There is no substitute for hands on learning and students will have many opportunities to link classroom teaching to real patients in the experiential program. The application and reinforcement of didactic learning will occur in each program year. Each clerkship experience will be carefully designed and integrated with the curriculum. It will build on previous experiences, increasing in intensity, and will be structured to support the growth of students' capabilities to provide patient centred care. The outcome of activities will be standardized to develop in students the necessary knowledge, skills and attitudes to care for patients and manage drug therapy issues. Throughout the experiential program, students will be exposed to a

<sup>&</sup>lt;sup>2</sup> Association for Experiential Education. What is experiential education? Available from <a href="http://www.aee.org/about/whatIsEE">http://www.aee.org/about/whatIsEE</a>. Accessed September 17, 2013

variety of disease states as well as diverse patient populations. All clerkship experiences will occur under the supervision of a pharmacist serving as a practice educator for the student.

The first Introductory Pharmacy Practice Experience (IPPE I) of six weeks (9% of experiential curriculum) will begin early in the program. Starting in first year, experiential learning will be introduced as a combination of longitudinal and block learning that will focus on core competencies. Within the longitudinal learning, students will have opportunities to participate in Interprofessional activities, community service learning, physician office visits – ideal for the development of fundamental skills and attitudes such as providing care, communication and professionalism. In the block learning, the focus is on prescription processing, drug distribution systems and select patient care activities. Students are expected to recall knowledge, comprehend and apply knowledge in simple patient care situations. Students must determine if the patients' drug therapy is necessary, effective, and safe and if there are any adherence issues. If a drug-related problem is identified, students must consider and compare feasible alternatives with respect to their advantages and disadvantages. This exercise requires students to incorporate biomedical sciences, pharmaceutical sciences, clinical pharmacokinetic principles and dosing implications, and therapeutic considerations.

The second and third Introductory Pharmacy Practice Experiences, IPPE II and IPPE III, occur in PY2 and PY3, respectively. The focus of IPPE II and IPPE III are direct patient care activities and includes activities associated with new and refill prescriptions, non-prescription requests, and disease management consultations for patients. The focus is on knowledge; comprehension and application of knowledge learned in the medication management modules. Students must determine if the patients' drug therapy is necessary, effective, and safe and if there are any adherence issues. If a drug-related problem is identified, students must consider and compare feasible alternatives with respect to their advantages and disadvantages. This exercise requires students to incorporate biomedical sciences, pharmaceutical sciences, clinical pharmacokinetic principles and dosing implications, and therapeutic considerations. IPPE II is a guided and directed rotation with students having limited autonomy. IPPE III is a guided and directed rotation with increasing autonomy.

The advanced pharmacy practice experiences (APPE) occur in PY4 and comprise 24 weeks of experiential education. The focus of the APPE rotations is direct patient care experiences in multiple inpatient and outpatient practice settings. The APPE rotations are experience-based integrated problem-solving courses where the student will be an active participant in providing direct patient care. Students will practice collaboratively with other health care professionals in providing medication management services. The student under the direction of a site preceptor is expected to integrate (analyze, synthesize and evaluate) their knowledge of pharmacotherapy, disease states, dosage formulations and pharmacokinetics in developing and assessing therapeutic plans and in evaluating drug selection for patients. Each rotation will stress outcome-oriented decision making in clinical situations regarding drug therapy in specific disciplines. Students are expected to be more autonomous in the APPE rotations and independently monitor and present assigned patients, and interact with patients and health care professionals. Over the course of their experiences, students will gain confidence in making recommendations and participate in decisions about drug therapy considering factors involving efficacy, toxicity, cost, third party coverage, and unique methods of delivery.

#### **Interprofessional Education (IPE)**

A comprehensive approach to integrating interprofessional learning, and interprofessional collaboration into the curriculum has been undertaken and will be executed under the guidance of the Interprofessional Education Working Group, which is multidisciplinary and involves multiple stakeholders. The following principles and practices are employed in the program:

- 1. IPE is embedded in all years of the program, and occurs frequently, sequentially and increases in complexity.
- 2. An "IPE Coordinator" develops learning objectives, competency assessments, identifies and facilitates collaboration opportunities throughout the program. They work closely with other programs (medicine, nursing, dentistry, dietetics, others) and the College of Health Disciplines to explore and coordinate potential interprofessional opportunities between our students. The Coordinator also works closely with the Office of Experiential Education (OEE), the Director of the Pharmacist's Clinic and other health programs to explore the potential for IPE immersion activities in experiential clinical sites.
- Patient cases utilized in Medication Management modules are mapped for IPE content in the "foreground" or "background", the level of skill development (e.g. foundational or comprehensive), and the themes (e.g. collaboration).
- 4. Formal IP educational sessions have learning objectives.
- 5. The Foundations of Pharmacy course (PHRM 100) contains a module focusing on development of foundational interprofessional skills. This includes interprofessional communication skills (interpersonal negotiation, perspective taking), reflection upon students' professional identity so that they have a stronger sense of 'self' before collaborating with other health care students, and other foundational interprofessional competencies.
- 6. Preceptors in the Experiential Education curriculum are trained on the six competencies required to collaborate interprofessionally so that they are able to confidently model a positive collaborative relationship with other health care providers. This is done in partnership with Continuing Pharmacy Professional Development (CPPD), OEE and the IPE Coordinator.
- 7. IPE activity is mapped against the CIHC National Competency Framework for IPE [Canadian Interprofessional Health Collaborative (CIHC): A National Competency Framework for IPE (2010). College of Health Disciplines, University of British Columbia] to guide strategic and systematic embedding of IPE in the program. Competencies and Levels of performance required are consistent with the program's Cognitive Model (Figure 11) and the AFPC Outcomes (Figure 2), particularly the outcomes associated with the "Collaborator" role.
- 8. IP skills developed during the program systematically progress from "exposure" activities to more complex "immersion" activities.
- 9. Opportunities for additional IPE will be continuously sought, developed, piloted and incorporated into the curriculum as feasible.
- 10. Support will be provided to instructors to enable the development of cases that incorporate a range of IPE concepts from simple to more complex.
- 11. One non-instructional (no scheduled classes) day per week for IPE and experiential learning is incorporated into the program. This day will be different for each PY level and will be made to coincide with those chosen by other UBC health programs as much as possible.
- 12. IPE student competency assessment approaches will be evidence-based and reflect best practices. They will be developed and overseen by the IPE Coordinator, the Director of Assessment, and both the IPE WG and Assessment WG.
- 13. Peer-teaching and mentoring will be used wherever possible and beneficial.
- 14. Pharmacy students are encouraged to enroll in CHD IHHS courses and take part in other IPE-related activities that the CHD has to offer. Students will accrue points for their passport with all CHD sanctioned IP events.
- 15. Aboriginal health issues are embedded in the IPE curriculum where meaningful and relevant.
- 16. Health access inequities among vulnerable and marginalized populations are embedded in the IPE curriculum.

- 17. International IPE opportunities will be investigated in conjunction with existing programs, and collaboration with OEE and other Health professional disciplines.
- 18. Pedagogical research will be consistently incorporated into IPE activities and opportunities explored for developing collaborative research initiatives with other health disciplines.

#### **Non-Instructional Day**

The program includes one non-instructional day each week in PY1, PY2, and PY3. The purpose of the day is to give students opportunities to engage in experiential learning, service learning, self-study and reflection, and/or interprofessional learning. Some of this learning (e.g. experiential) will be within credited courses, some (e.g., interprofessional) will be mandatory, but not credited, as part of the UBC Interprofessional Education Passport program, and the balance will be flexibly determined by students.

The day of the week will vary from year to year, and will be confined to Tuesdays, Wednesdays, and Thursdays. As soon as possible, we will strive to align the days with similar-purpose days in the Medicine, Physiotherapy, and Nursing programs to facilitate interprofessional engagement and learning.

Students will be expected to engage in roughly 5 hours of learning per non-instructional day.

#### Cognitive Model, Levels of Performance, Complexity of Problems

As a competency-based curriculum, the program is guided by a cognitive model (Figure 11) which describes the **level** of performance students much demonstrate on tasks of defined **complexity** across the seven AFPC outcome **roles**.

The overall goal is for students to demonstrate at minimum, COMPETENT-level performance in each of the role domains. For the "Care Provider" and "Communicator" roles, PROFICIENT-level performance is expected. The program is designed such that these critically important roles are emphasized sufficiently to expect somewhat more than competency. Students may exceed competent-level in other role domains, which would exceed the program's requirements. It is recognized that proficient and expert-level performance may be achieved through experience post-program, and/or through further residency, fellowship, or degree training.

Complexity of problems (patient case complexity, individual patient problem complexity, non-patient problem complexity) is defined on a scale from LOW to MODERATE complexity. This scale is relative to the full continuum of complexity that clinicians must contend with in practice, *not* relative to the spectrum of complexity built into the program. Overall, graduates of the program will be competent to solve problems of moderate complexity at the competent-to-proficient level, depending on the role domain. This is coherent with the broader spectrum of pharmacist training in Canada, which includes post-entry-to-practice training in accredited pharmacy practice residencies (PGY1), advanced pharmacy practice residencies (PGY2), fellowships, and MSc and PhD programs. The competency domains are also coherent with the progression through post-graduate training. Organizations involved in the development, determination of learning outcomes and accreditation of these programs include: Canadian Hospital Pharmacy Residency Board (CHPRB) for PGY1 and PGY2 residencies; the American Society of Hospital Pharmacists (ASHP) for PGY2 residencies; and the American College of Clinical Pharmacy (ACCP) for fellowships. Entry to Practice PharmD curricula learning outcomes have been described by the Association of Faculties of Pharmacy of Canada (AFPC) and the Canadian Council for Accreditation of Pharmacy Programs (CCAPP).

**FELLOW-**PGY1 PGY2 RESIDENCY RESIDENCY SHIP E2P PHARM.D. CARE PROVIDER CARE PROVIDER MPROVE MED USE SYSTEMS COMMUNICATOR COLLABORATOR EDUCATOR MANAGER Madaugunas Sonobar PROFESSIONAL MANAGE OWN PRACTICE **AFPC CCAPP** LEADER **CHPRB CHPRB ACCP ASHP** 

Figure 10: Continuum of competency development and complexity in pharmacist training programs

Finally, although there is no formal Canadian consensus, there is relative consensus among pharmacy educational leaders about the following rationale for pharmacist training programs in terms of levels of performance and complexity at time of completion (Table 1):

**Patient / Task Complexity** 

**Table 1: Pharmacy programs rationalization** 

Program	Level of performance	Problem	Patient
BSc.(Pharm)	Outcomes-based	Low complexity	Low complexity
E2P PharmD	Competent	Moderate complexity	Moderate complexity
PGY1 Residency	Proficient	Moderate complexity problems OR Moderat complexity patients	
PGY2 Residency	Proficient	High complexity	High complexity
Post-grad PharmD	Bordering on expert	High complexity	High complexity

Figure 11: Cognitive Model for the UBC Entry-to-Practice PharmD Program





a place of mind

# **Cognitive Model**

#### COMPETENCIES / OUTCOMES

	Care Provider	Communicator	Collaborator	Manager	Advocate	Scholar	Professional
PY4	PROFICIENT-level performance on MODERATE-complexity tasks.	PROFICIENT-level performance on MODERATE-complexity tasks.	COMPETENT-level performance on MODERATE-complexity tasks.	COMPETENT-level performance on MODERATE-complexity tasks.	COMPETENT-level performance on MODERATE-complexity tasks.	COMPETENT-level performance on MODERATE-complexity tasks.	PROFICIENT-level performance on MODERATE-complexity tasks.
PY3	COMPETENT-level performance on MODERATE-complexity tasks.	COMPETENT-level performance on MODERATE- complexity tasks.	ADVANCED BEGINNER-level performance on LOW-MODERATE- complexity tasks.	ADVANCED- BEGINNER-level performance on MODERATE- complexity tasks.	ADVANCED BEGINNER-level performance on MODERATE- complexity tasks.	ADVANCED BEGINNER-level performance on MODERATE- complexity tasks.	COMPETENT-level performance on MODERATE-complexity tasks.
PY2	ADVANCED BEGINNER-level performance on LOW-MODERATE- complexity tasks.	ADVANCED BEGINNER-level performance on MODERATE- complexity tasks.	NOVICE-level performance on LOW-complexity tasks.	NOVICE-level performance on LOW-complexity tasks.	NOVICE-level performance on LOW-complexity tasks.	NOVICE-level performance on LOW- MODERATE- complexity tasks.	ADVANCED BEGINNER-level performance on LOW-complexity tasks.
PY1	NOVICE-level performance on LOW-complexity tasks.	NOVICE-level performance on LOW-complexity tasks.	NOVICE-level performance on LOW-complexity tasks.	COMPLEXITY	LEVEL Expert	NOVICE-level performance on LOW-complexity tasks.	NOVICE-level performance on LOW-complexity tasks.
				High Moderate Low-Moderate Low	Proficient Competent Advanced Beginner Novice		

#### **Elective Learning**

PY3 and PY4 will afford opportunities for elective coursework, all of which is considered part of an "Elective Learning" program. Elective courses will be categorized into three themes: Pharmaceutical Sciences, Pharmacy Practice, and Business & Practice Management. A list of approved electives relevant to these themes from across UBC will be provided. Several PHRM electives in these categories will be developed. We will also develop some elective experiential clerkships for PY4 that align with these themes. Students will be free to design their own elective learning program from among these courses.

#### **Program Evaluation**

#### **Summative Evaluation**

Evaluations of teaching and courses will be carried out in each term per academic year (Sept – April). The Office of Educational Support and Development (OESD) coordinates all the evaluation surveys, in consultation with Course Coordinators and instructors.

#### **Student Evaluations of Teaching**

All instructors who have teaching responsibilities over 5 hours per course are required to have their teaching evaluated by their students. The OESD's Program Evaluation function oversees the coordination

and reporting out from these evaluations of teaching. Feedback from students (anonymity protected) on an individual's teaching is reported out in aggregate to the Dean, the Associate Dean, Academic, and the instructor.

Students are encouraged to provide constructive feedback. Instructors are encouraged to reflect on student feedback and make changes/improvements as appropriate.

#### **Course Evaluation**

Course evaluations are also required on courses that are new (run in its first or second year) or those that have undergone recent course changes. Course evaluation surveys can also be initiated by instructors (ondemand basis). Instructors can request a course evaluation by contacting the director of OESD.

#### **Experiential Rotation Evaluation**

Overall experiential rotations and rotational preceptors are evaluated by students after each rotation. The Office of Experiential Education (OEE) administers the Preceptor Evaluation through UBC's Connect. The Course/Rotation evaluation is administered by the OESD through CoursEval (UBC's Course Evaluation system).

#### **Formative Evaluation**

Early feedback on teaching is a good approach to improve practice before the end-of-course (summative) evaluations. Instructors are encouraged to implement early feedback techniques, which can be done quickly, informally, and simply.

Some examples of formative evaluation strategies are:

- Use "Early Feedback" Survey Form in class (OESD provides the form)
- Engage in a "Brief Q&A Period" with students (5 mins) at start of one class
- Arrange for a "Silent Observer" in the class and ask this person to give you feedback at the end of class
- Use a Feedback Circle of students to give feedback at the end of class. (This can be a quick 5 mins. discussion on what's working and what's not working for students.)
- Hand out index cards during class for comments
- Post a Feedback/Suggestions Box (or envelope) outside instructor's office for anonymous comments
- Use a Learners Journal (could be online) to ask students to document their experiences.

The Faculty encourages instructors to incorporate a technique into their classroom that suits them best, and keep experimenting with different methods to optimize results.

#### **Peer Review of Teaching**

A formal peer review is required for all faculty members every 5 years, and as needed for tenure and promotion. The evaluation becomes a permanent record in the individual's teaching dossier. A copy of the peer review report is always kept on file in the Associate Dean, Academic's Office.

An informal peer review may be carried out for formative purposes. This peer observation of classroom teaching by a respected peer is required for all new faculty members, who should also have at least one informal peer review of teaching prior to his/her first formal review.

#### **Comprehensive Educational Assessment Strategy**

The Faculty has invested significantly in its Assessment Working Group over the past 5 years and engaged expert consultancy from Gordon Page, Co-Director Faculty of Medicine Dean's Office, Clinical Competence Program, to help contemporize our assessment practices. One product of this effort is a new Assessment Guide intended to help all instructors employ evidence-based assessment practices matched to the learning outcomes or competencies and levels of performance required in their courses. Furthermore, at the end of 2013, a new position entitled Director of Educational Assessment was created. The Director of Educational Assessment is responsible for developing and implementing a comprehensive assessment program (formative and summative) for the Faculty's professional degree programs, focusing on the entry-to-practice degree program. Specific responsibilities include, but are not limited to: chairing the Faculty's Assessment Committee; leading and supporting development initiatives to enhance assessment capabilities and practices of faculty members and students; developing and implementing a system of course-level and program-level assessment of student learning aligned with the educational outcomes of the Association of Faculties of Pharmacy of Canada and accreditation standards as set by the Canadian Council for Accreditation of Pharmacy Programs; developing and maintaining appropriate databases; preparing reports on assessment activities; and engaging in and supporting scholarship related to assessment.

#### Tenets of the Assessment strategy include:

- Assessments must be developed so that students can demonstrate expected performance of a
  particular skill/competency (note: a non-compensatory model will be used where competency in
  one area/skill does not compensate for poor competency in another area/skill)
  - o Expected levels of performance of skills and/or competencies must be demonstrated as preconditions to advance through the curriculum
  - Since our primary role is to prepare patient care providers who are ready to enter practice by meeting the AFPC outcomes, the assessment program focus on their performance working with patients as much as possible
  - Levels of performance will be assessed according to the program's cognitive model (Figure 11), which will, in turn, affect the choice of assessment strategy.
- Both formative assessments FOR learning and summative assessments OF learning will be used to
  guide student learning and to document student progress through the curriculum. These authentic
  assessments will be part of, and aligned with the instructional/learning activities and objectives.
- The assessment program will include a focus on how to think (reason) through a process to ensure sound decision-making.
- Assessments must be part of and aligned with the instructional activities and objectives/outcomes.

Assessments across the program will be developed and implemented by course faculty with leadership from the Faculty's Director of Student Assessment and the program's Student Assessment Committee. All assessments in the program will be conducted in accordance with the goals and principles of assessment outlined in the program's "Guide to Assessing Student Learning in the Entry to Practice PharmD Program". These goals and principles which underlie the summary of the assessment program provided above have been abstracted from the "Guide" and are listed below.

#### Goals of the assessment system:

- Support the E2P PharmD program in meeting its responsibilities to the public, the profession and to the Faculty by ensuring that all graduates have achieved the required competencies and are capable of safe and effective practice.
- 2. Foster in learners a culture of responsibility for on-going learning and improvements in their own, their colleagues', and their group's/team's performance toward achieving better health outcomes for patients and populations.
- 3. Optimize the capabilities of all learners by providing motivation and direction for future learning with regular, appropriate, and timely feedback and by fostering collaborative and supportive learning and practice.
- 4. Employ consistently across the program best-evidence assessment-of-learning strategies that are aligned with the program goals and allow for reliable, fair, and valid inferences about learners' achievement of the required competencies.
- 5. Function as part of a continuous quality improvement process that reflects the reality of the learning process, the advances in education, the development of educational assessment practices and leads to better student performance, a more effective curriculum and improvements in the assessment system itself.

#### Principles of the assessment system:

#### System characteristics

- 1. The assessment program, like the curriculum, will be 'learning-centered' in contrast to 'teacher-centered' or "learner/student-centered". Both teachers and students share the responsibility that learning occurs and the standards are met.
- 2. A programmatic approach to assessment design is taken. All assessments are selected, designed and conducted, as part of the 'program of assessment', to:
  - a. Motivate and guide students on what is important to learn ('assessment drives learning');
  - b. Provide constructive feedback to students regarding their strengths and weakness (formative assessment); and
  - c. Provide the basis for an accurate judgment of a student's achievement (summative assessment).
- 3. Both module (course) specific and program wide assessments are important components of an assessment program
  - a. 'Module specific' assessments are directly and representatively linked to specific module objectives.
  - b. 'Program wide' assessments at the end of a semester or year, or at the end of program are 'comprehensive' assessments that test all learning up to that point in the curriculum.
- 4. The knowledge, skills and attitudes tested across all assessments in the curriculum (i.e., in the curriculum's 'assessment program') comprehensively address the AFPC's "Educational Outcomes for First Professional Degree Programs in Pharmacy in Canada (2010)".
- 5. The assessments of knowledge, skills and attitudes focus on their application and integration on tasks relevant to the practice of pharmacy, in contrast to their simple recall or demonstration in the abstract. Assessment tasks closely match what learners are expected to do in practice. Certain elective courses may be exempt from this principle.

#### **Operation**

6. The assessment program is matched to the design of the E2P PharmD curriculum and serves as an integral component of that curriculum.

- 7. The assessment program employs those assessment methods that most effectively assess different student competencies. Assessment methodologies are selected based on the best available evidence about their use in assessing the specific outcomes or objectives of concern (e.g. MCQ, written, and oral examinations predominantly for assessing knowledge; direct observation of performance, practice examinations, standardized-patient based examinations predominantly for assessing skills.)
- 8. The assessment program employs a variety of strategies in using the assessment methods, with the selection of the strategies guided by the potential 'utility' of each.
- 9. 'Formative' assessments, or 'assessments for learning' in contrast to 'assessments of learning', are strategically timed so as to have the maximum impact on student learning.
- 10. Appropriate standard-setting methods are used for all assessments and the resulting standards are consistently applied across educational contexts and sites.
- 11. Students must satisfactorily pass all required assessments prior to the granting of their degree. The assessment program will employ a 'non-compensatory system', in that good performance in one area of the curriculum will not compensate for poor performance in other areas.

#### Flexibility, sustainability and governance

- 12. Faculty members and course directors will retain ownership and responsibility for test development and administration related to their modules, while the assessment program as a whole will be centrally managed under the guidance of a Student Assessment Committee (including student members) and with leadership and support from the Director of Assessment and support of key secretarial and IT staff.
- 13. Student Progress Committees (SPCs), comprised by the Course Coordinators for a year and assessment leaders, review assessment data at regular intervals and make summative decisions on student standing and conditions for advancement.
- 14. The assessment program should include quality improvement processes aimed at enhancing the assessment process (and thus student learning and the assessment of that learning), as well as at ensuring a manageable and sustainable assessment program.
- 15. The quality of the assessment program and of the individual assessments comprising the program are evaluated using the criteria comprising the 'utility' concept (van der Vleuten), where 'utility' is defined to be a function of an assessment's validity, reliability, educational impact, acceptability and cost: U = f(V, R, E, A, C).
- 16. A formal program of faculty orientation and development will accompany the introduction and ongoing implementation of the assessment program.
- 17. A dedicated budget is established for the assessment program, to include all costs related to personnel, IT, faculty development, etc.

#### **Faculty Development Strategies**

We have struck a Faculty Development Working Group whose mission is to, in conjunction with our Office of Educational Support and Development, identify faculty learning needs and develop strategies to meet them.

The group has begun to identify these needs and will roll out strategies to meet them over the 2 years between now and program commencement.

#### **Transition Strategy & Timelines**

**Figure 12: Transformation Matrix** 



### **Transformation Matrix**

Creating new programs, transitioning existing programs.

4	Sep 2013	Sep 2014	Sep 2015	Sep 2016	Sep 2017	Sep 2018	Sep 2019
B.Sc.(Pharm)	Y1 Y2 Y3 Y4	Y1 (last) Y2 Y3 Y4	Y2 Y3 Y4	Y3 Y4	Y4 Last grads May 2018		
E2P PharmD			PY1	PY1 PY2	PY1 PY2 PY3	PY1 PY2 PY3 PY4 1st grads May 2019	PY1 PY2 PY3 PY4
PG PharmD							
Flex PharmD							
PGY1 Residency							
PGY2 Residency							
Fellowship, MSc, PhD, Combined Degrees							

The PharmD curriculum will be phased-in over four years, with the first cohort anticipated to enter the program in 2015W and graduate in May of 2019.

#### **Budgetary Impact of Curriculum Changes**

We have engaged with UBC's Strategy & Decision Support (SDS) group, who modeled the proposed budget. We have followed the Vice-President Students Office's process for consulting with students regarding the new program tuition, and have received the approval of the Faculty of Pharmaceutical Sciences Dean, the SDS, and the Provost's Office.

#### Part 3 – Stakeholder Consultations

#### **Summary of Consultations**

#### **Consultation with the Pharmacy Professional Community**

- BC Pharmacy Association (BCPhA)
- Canadian Society of Hospital Pharmacists (CSHP)
- Canadian Association of Chain Drug Stores (CACDS)
- BC Pharmacy Practice Residency Programs
- UBC Faculty of Pharmaceutical Sciences Alumni, through Town Halls held around the province

#### **Consultations with Health Authorities**

- BC Health Authorities Directors of Pharmacy
  - o Fraser Health
  - o Interior Health
  - o Providence Health Care
  - Vancouver Island Health Authority
  - o Vancouver Coastal Health
  - o Northern Health
  - o Provincial Health Services Authority
- UBC Vancouver Coastal Health Authority Providence Health Care Joint Advisory Council

#### **Consultation with Accrediting Bodies**

- Canadian Council for Accreditation of Pharmacy Programs (CCAPP)
- Canadian Hospital Pharmacy Residency Board (CHPRB)

#### **Consultation with Regulatory Body**

College of Pharmacists of British Columbia (CPBC)

#### **Consultation with UBC Affected or Related Programs**

- UBC Faculty of Arts
- UBC College of Health Disciplines
- UBC Faculty of Dentistry
- UBC Faculty of Medicine
- UBC School of Nursing
- UBC Faculty of Science

#### **Student Consultation**

- We have hosted Student Town Hall events in March 2013 and October 2013, which were captured and are available to students for viewing. Both events were well attended, with more than 150 students each.
- We have promoted the E2P Pharm.D. Feedback website as an avenue to inform students and gather feedback http://www.pharmacy.ubc.ca/programs/e2ppharmd.

- Students have been engaged in the program development process through their representatives on all Working Groups and the Task Force, and students have been present at all Faculty meetings related to the program.
- The president of the Pharmacy Undergraduate Society (PhUS) accompanied the Dean, Associate Dean and Program Director to meetings with the Ministry of Health and the Ministry of Advanced Education related to the program.
- We have engaged with the UBC Vice-President Students' office student tuition consultation process.

#### **Library Consultation**

• The UBC Library was consulted as part of the regular approval process. All courses were deemed to have an impact on the Library, which can be supported.



### **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)

Category: (1)			
Faculty: Pharmaceutical Sciences		<b>Date:</b> 3 June 2013	
<b>Department:</b> N/A		Contact Person: Peter Loewen/Glenda	
Faculty Approval Date: 31 Oct 2013		MacDonald	
Effective Session (W or S): Winter		<b>Phone:</b> PL:71814, GM:23085	
Effective Academic Year: 2015		Email: peter.loewen@ubc.ca;	
		glenda.macdonald@ubc.ca	
		URL:	
		http://www.calendar.ubc.ca/vancouver/inde	
		x.cfm?tree=12,213,0,0	
		<u>X.cmi:uee=12,213,0,0</u>	
Duanagad Calandan Entury		Duagant Calandan Entury	
Proposed Calendar Entry:		Present Calendar Entry:	
Homepage > Faculties, Colleges, and		Homepage > Faculties, Colleges, and	
Schools > The Faculty of Pharmaceutica	al	Schools > The Faculty of Pharmaceutical	
Sciences		Sciences	
_			
Contents	_	Contents	
Introduction	$\rightarrow$	Introduction $\rightarrow$	
<b>Entry-to-Practice Doctor of</b>	$\rightarrow$		
Pharmacy		Bachelor of Science in Pharmacy → Continuing Pharmacy Professional →	
Bachelor of Science in Pharmacy	$\rightarrow$	Continuing Pharmacy Professional $\rightarrow$	
Continuing Pharmacy Professional	$\rightarrow$	Development	
Development		Residency Programs $\rightarrow$	
Residency Programs	$\rightarrow$	Graduate Programs →	
Graduate Programs	$\rightarrow$	Graduate Programs → College of Pharmacists of BC →	
College of Pharmacists of BC	$\dot{\rightarrow}$	Pharmacy Examining Board of	
Pharmacy Examining Board of	÷	Canada	
Canada	•	Academic Staff →	
Academic Staff	$\rightarrow$	Academic Stan	
Academic Staff	7		
		TD C A . 4°	
		Type of Action:	
		• Create a new section in the Faculty of	
		Pharmaceutical Sciences chapter for the	
		new entry-to-practice Doctor of	
		Pharmacy program.	
		Rationale for Proposed Change:	
		This proposal is to create a new Calendar	
		section in the Pharmaceutical Sciences	
		chapter, dedicated to the entry-to-practice	
		Pharm.D. program.	
		Tham.D. program.	
		Recause the R Sc (Phorm ) degree will	
		Because the B.Sc.(Pharm.) degree will	



continue to be offered until the last cohort has graduated (anticipated in May 2018), it is important that the B.Sc.(Pharm.) section of the Calendar continues to be published.

#### **Proposed Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Entry-to-Practice Doctor of Pharmacy

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Academic Regulations	-
Degree Requirements	<del>)</del>

#### **URL:**

To be created

#### **Present Calendar Entry:**

None.

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

 Create a new section in the Faculty of Pharmaceutical Sciences chapter for the entry-to-practice Doctor of Pharmacy program.

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

The Pharm.D. Calendar entry contains all of the sub-sections required of new programs. Prospective and current students navigating the Calendar will be able to find relevant program information in these pages.

#### **Proposed Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Entry-to-Practice Doctor of Pharmacy > Introduction

#### Introduction

The program leading to the Entry-to-Practice Doctor of Pharmacy is designed to prepare graduates for contemporary and future pharmacy practice in healthcare settings such as community, primary care, ambulatory care, and hospital practice; and for industry, government, and other specialized fields. The program satisfies the requirements of the College of Pharmacists

#### **URL:**

To be created

#### **Present Calendar Entry:**

None.

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

- Create an "Introduction" section in the Faculty of Pharmaceutical Sciences chapter for the Doctor of Pharmacy program.
- Include links to the B.Sc.(Pharm) and graduate Pharm.D. Calendar entries.

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

This section serves as a brief introduction to the program, and positions the Pharm.D. as the entry-to-practice credential for the

BC for academic qualification for licensing in BC. It also meets standards approved by the Canadian Council for the Accreditation of Pharmacy Programs.

For the Bachelor of Science in Pharmacy, see B.Sc.(Pharm).

For the graduate Doctor of Pharmacy, see Graduate Pharm.D.

pharmacy profession.

#### **Proposed Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Entry-to-Practice Doctor of Pharmacy > Academic Advising

Academic Advising

Advising is not required for most students but is available on request. The Faculty reserves the right to make advising mandatory prior to registration for students with academic problems. Call 604.822.0344 or email <a href="mailto:undergrad.pharm@ubc.ca">undergrad.pharm@ubc.ca</a> to arrange an appointment with an advisor.

**URL:** To be created

#### **Present Calendar Entry:**

None.

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

 Create an "Academic Advising" section in the Faculty of Pharmaceutical Sciences chapter for the Doctor of Pharmacy program.

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

This section fulfills the Senate requirement for program Calendar statements to include a section on Academic Advising. In this section, students will find advising contact information

URL: to be created

#### **Present Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Entry-to-Practice Doctor of Pharmacy > Admission

Admission

The Faculty will select for admission those students who not only demonstrate

**URL:** to be created

#### **Present Calendar Entry:**

None.

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

 Create an "Admission" section in the Faculty of Pharmaceutical Sciences chapter for the Doctor of Pharmacy program.

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

academic potential, but who also most aptly display a motivation to study pharmaceutical sciences and who demonstrate the qualities and skills most necessary to be a caring and competent pharmacist.

To be considered for admission to the fouryear program, applicants must

- Have completed 60 credits of postsecondary coursework within 10 years of application; and
- Meet a minimum overall average of 65% calculated on the last 30 credits of coursework and a minimum core average of 65% calculated on the required courses listed below, or their equivalents taken at an approved college or university. All attempts at core courses (completed within the last 10 years) are used in the calculation of the core average.

Note: Because enrolment in the program is limited and competitive, applicants should be aware that satisfying the minimum entrance requirements does not guarantee admission. Applicants with a competitive average will be invited for an interview. In the selection of applicants, preference is given to well-qualified residents of BC who are Canadian citizens or permanent residents of Canada. Special consideration may be given to Aboriginal applicants and applicants from under-represented areas of BC.

Applications received with incomplete documentation or without the correct fees will not be processed. Late applications will not be considered.

Students are not admissible to the program directly from a high school or secondary school program (BC Grade 12 or equivalent obtained in any province).

The admissions requirements for the Pharm.D. will differ from the B.Sc.(Pharm) requirements in two significant ways:

1. We will move from a 30-credit requirement to a 60-credit requirement.

This change will allow students to complete the non-pharmacy courses that were previously a part of year one in the B.Sc.(Pharm) prior to admission to the Pharm.D. program. Moving these requirements into a second prerequisite year allows us to devote a significant portion of the program to the increased experiential learning component of the Pharm.D.

2. We will require a minimum of 6-credits of Humanities or Social Sciences.

The profession of pharmacy requires good communication skills and critical thinking abilities. The January 2013 Canadian Council for Accreditation of Pharmacy Programs (CCAPP) accreditation standards require programs to include "general education" in their pre-professional requirements, defined as "humanities, behavioural sciences, social sciences, and communication skills". By adding a requirement for humanities or social sciences credits, the Pharm.D. meets the accreditation standard, and allows the student to build on their foundation throughout the program.

dmission to the Pharm.D. is to the first year of a four-year program following at least two (2) post-secondary years. Students must complete at least 60 credits of coursework by the end of the academic term in which application is made.

The required (core) courses<sup>1</sup> are:

BIOL 112 or MICB 201, **Biology** 

plus BIOL 121 and BIOL

140

BIOL 200 and BIOL 201 or

**BIOC 202** 

Chemistry CHEM 111 & 113 or

> CHEM 121 & 123 CHEM 233 & 235 or

**CHEM 203** 

1st year (6 credits)<sup>2</sup>. ENGL **English** 

112 is recommended.

Humanitie 6 credits of humanities or social sciences courses<sup>3</sup> s or Social

Sciences

Mathemati MATH 102 (recommended)

or MATH 100, 104, 110, cs

120, 180 or 184, plus

MATH 103 (recommended) or MATH 101, 105 or 121

Microbiol **MICB 202** 

ogy

**Statistics** STAT 200 or 203, or BIOL

Sufficient credits to bring Elective(s)

total to at least 60.

<sup>1</sup> Acceptable in lieu of first year (1xx) requirements is the UBC Science One Program (plus 6 credits of first-year English). There may be additional alternate courses that satisfy the requirements listed in this table. Consult the <Science Credit Exclusion List> [link to UBC Calendar 12,215,410,414#4971] for a complete list. <sup>2</sup> SCIE 113 will be accepted in lieu of 3

credits of first-year English.

<sup>3</sup> Any course offered by the Faculty of Arts at any year level. ENGL courses used to satisfy the 6-cr of first-year English

requirement cannot count towards satisfying the Humanities or Social Sciences requirement.

<sup>4</sup> Electives will not be used in the calculation of the core admission average.

Applicants without these specific UBC courses need to present a full year (i.e., two semesters) of:

- first-year university biology with a lab
- first-year university chemistry with a lab
- first-year university English (for which UBC gives transfer credit)
- first-year university calculus

#### Also required:

- one semester of second-year cell biology or genetics
- two semesters of second-year organic chemistry
- two semesters of second-year microbiology
- one semester of introductory statistics
- one semester of introductory second-year biochemistry
- two semesters of humanities or social sciences coursework at any year level

#### Additional Requirements

- Personal Profile
- Interview for selected applicants

Detailed information on admission requirements for all applicants is available from the <u>Faculty</u>.

#### **Proposed Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical **URL:** To be created

**Present Calendar Entry:** 

None.

# Pharmacy > Post-Acceptance Requirements

#### Post-Acceptance Requirements

The Faculty of Pharmaceutical Sciences requires all students to be fully compliant with the current guidelines against vaccinepreventable diseases prior to the commencement of clinical activities. These guidelines state proof of immunity status must be available and the clinical site can request a copy of immunization documentation from students at any time in preparation for or during a clinical placement. Prior to the end of their first term, students should be enrolled in Student Health Services, who will screen for compliance with BC Guidelines that may include Tetanus/Diphtheria-Toxoid, Polio, MMR, Chickenpox and Hepatitis B, and a negative TB skin test result (if the skin test is positive, a chest x-ray is required). Failure to comply with documentation requirement could result in the individual being barred from the clinical setting.

All students will have their vaccination records reviewed. Students with a positive test result or those who are unable to comply with vaccination requirements for any communicable disease may face restrictions in the course of their pharmacy training and may be constrained in their ability to practice.

In addition, all students are required to obtain an influenza vaccination each year. If it is contraindicated for a student to receive the influenza vaccine, the student must have a current written prescription for antiviral medication. In the event of an influenza outbreak at the healthcare

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

 Create a "Post-Acceptance Requirements" section in the Faculty of Pharmaceutical Sciences chapter for the Doctor of Pharmacy program.

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

The post-acceptance requirements for the Pharm.D. students will be the same as for the B.Sc.(Pharm) students. This section is a copy of the B.Sc.(Pharm) post-acceptance requirement, but written for Pharm.D. students.

evidence of a current influenza vaccination must be provided. Pharmacy students must meet the current immunization requirements of the Health Authority in which they are doing their placement.

All newly admitted students to the Doctor of Pharmacy program are required to register with the College of Pharmacists of B.C. Registration includes, but is not limited to, submission of a Notarized Identification form and a Criminal Record Check Authorization form.

#### **Proposed Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Entry-to-Practice Doctor of Pharmacy > Academic Regulations

#### **Academic Regulations**

Regular attendance is expected of students in all their classes (including lectures, laboratories, tutorials, and seminars). Students who neglect their academic work and assignments may be excluded from the final examinations. Students who are unavoidably absent because of illness or disability should report to their instructors at the earliest opportunity.

Students who, because of illness or other personal issues, are absent from a final examination must request Academic Concession from the Faculty's Office of Student Services. Requests may require supporting medical or other appropriate documentation.

The passing mark for a course in the

**URL:** To be created

#### **Present Calendar Entry:**

None.

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

 Create an "Academic Regulations" section in the Faculty of Pharmaceutical Sciences chapter for the Doctor of Pharmacy program.

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

The academic regulations for the Pharm.D. differ from the B.Sc.(Pharm) program in the following significant ways:

1. The passing mark for a course is increased from 50% in the B.Sc.(Pharm) to 60% in the Pharm.D.

As a professional doctoral degree program, a 60% passing grade is a justifiably higher pass threshold than a B.Sc. program. This is also more aligned with our current graduate PharmD program passing grade of 65%.

2. The definition of a "Failed Year" A "failed year" is considered to be the failure of a Foundations of Pharmacy (18cr) or a Medication Management (12-



A student who has failed the Foundations of Pharmacy course or a Medication Management course in a Winter Session will be considered to have failed in the work of that session, and will not receive credit for any of the courses passed in that session (failed year).

Any student whose academic record, as determined by the tests and examinations of the first term, is found to be unsatisfactory, may be required to discontinue attendance at the University for the remainder of the session.

Assessments, including but not limited to term essays and examination papers, may be refused a passing mark if they are noticeably deficient in the quality of written English, including the correct use of grammar, spelling, and punctuation.

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 Faculty reserves the right to require a student to withdraw from the Faculty if that student is considered to be unsuited to proceed with the study or practice of pharmacy.

#### Dean's Honour List

Students with a standing of 80% or better in the previous Winter Session will receive the notation "Dean's Honour List" on their records. A full course load is required in every program year.

#### **Promotion Requirements**

To be promoted, a student in the Faculty of

15cr) course in the Pharm.D. program. In the B.Sc.(Pharm), a failed year was defined as failure of two courses or more for a total of 12 credits or more.

3. Included references to Foundations of Pharmacy and Medication Management module examinations under Supplementals and Examinations for Higher Standing

We wish to offer students opportunities to remediate within the large-credit courses Foundations of Pharmacy and Medication Management I-V. This will allow struggling students a chance to recover from the failure of a module.

Harmaceutical Sciences must pass all of the required courses of the program year in which the student is registered.

The following notes apply to these requirements:

- Required courses are used for this computation (elective courses are excluded). Failure in elective courses requires that the course be repeated, or an approved alternative course be taken. This calculation is undertaken at the end of each Winter Session.
- A student who is not promotable will not be able to take any of the required courses of subsequent years.
- A student who fails to meet promotion standards for a second time, either in a repeated year or a subsequent year, will normally be required to withdraw from the program.
- Courses for which credit has not been obtained must be repeated (or permissible substitutes taken) in the next regular session attended. In the Winter Session, the total for all courses taken may not exceed 45 credits, except with approval of the Dean.

### **Supplementals and Examinations for Higher Standing**

Supplemental examinations are not available in all courses. Supplemental examinations will be available in courses or modules where any single examination constitutes 40% or more of the final course or module grade. Supplemental examinations will normally be a comprehensive examination of the full course or module's work and should receive a substantial value of the total mark. The supplemental mark should replace all of the marks received on examinations of the content of the course

module, as applicable.

- 1. In courses or modules where supplemental examinations are available, a student will be notified of their eligibility.
- 2. A supplemental examination may be written only once except in the case of a final year student, who may write twice. Should a supplemental be failed the course concerned must be repeated or a suitable substitute taken.
- 3. Where supplemental privileges are granted, the standing will be recalculated.
- 4. The above policy applies only to courses or modules administered by the Faculty. Faculties and departments responsible for other required or elective courses in the Doctor of Pharmacy program may have different policies on supplementals and examinations for higher standing.

#### **Proposed Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Entry-to-Practice Doctor of Pharmacy > Degree Requirements

#### **Degree Requirements**

#### **Doctor of Pharmacy**

The first week of the first year will include both scheduled coursework and a formal orientation program. This orientation will introduce students to the Faculty, its expectations for academic and professional conduct, and some of the skills required to succeed in the program. **URL:** To be created

#### **Present Calendar Entry:**

None.

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

 Create a "Degree Requirements" section in the Faculty of Pharmaceutical Sciences chapter for the Doctor of Pharmacy program.

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

The coursework listed is required for attainment of the Doctor of Pharmacy degree. We believe it is useful for potential students to have a clear explanation of what the program of study involves and the relative weighting of courses within the

(4)	
Professional Year 1 (PY1)	
PHRM 100	18
PHRM 111	15
PHRM 131	2
PHRM 141	2
PHRM 161	2
PHRM 171 <sup>1</sup>	3
Total Credits	42
Professional Year 2 (PY2)	
PHRM 211	15
PHRM 212	15
PHRM 221	3
PHRM 231	2
PHRM 241	2
PHRM 251	1
PHRM 271 <sup>1</sup>	4
Total Credits	42
Professional Year 3 (PY3)	
PHRM 311	12
PHRM 312	12
PHRM 341	2
PHRM 351	3
PHRM 371 <sup>1</sup>	4
Electives <sup>2</sup>	9
Total Credits	42
Professional Year 4 (PY4)	
PHRM 441	1
PHRM 471 <sup>3</sup>	16
PHRM 471 <sup>3</sup>	10
PHRM 473 <sup>3</sup>	5
PHRM 481	5 2
Electives <sup>2</sup>	6
Total Credits	40
<b>Total Credits for the Program</b>	166

program.

Completed in the summer after completing the prior academic term.

<sup>2</sup>Of the 15 elective credits required in the program, all must be chosen from offerings within or approved by the Faculty. Courses taken prior to entry to the program will not be credited toward elective requirements.

Students must meet minimum requirements for community and institutional practice experience before opting for alternate practice sites.

### **Clinical Clerkships and Additional Expenses**

Required clinical clerkships sites that have been approved as affiliated teaching sites by the Faculty will be supervised by University-appointed personnel. These clerkships may be scheduled in community and hospital pharmacies, health care agencies and institutions, manufacturers in the pharmaceutical industry, and with selected pharmacy organizations. Clerkship sites outside the Metro Vancouver area are also used. All students will be required to spend a minimum of 25% of their 46 weeks of clerkship outside the Metro Vancouver area.

Students will be required to pay the Doctor of Pharmacy practice fee. See <u>Program and Course Fees</u>. Students should be prepared for clinical clerkships in sites around BC and therefore should also include travel and accommodation costs for these experiences in estimating total personal expenses.

#### **College Registration Requirement**

Students must register with the College of Pharmacists of British Columbia during their first year in the Faculty. This registration will be completed during Term 1 of Winter Session. Proof of such registration will be a requirement for admission into both the Pharmacy Skills Professional Practice Centre and structured practical experience courses.

#### **Interprofessional Education Passport**

Under the auspices of the Council, the

responsible for the administration of interprofessional courses and hosts an online Interprofessional Education Passport. Students must use the passport to record their interprofessional education activities, including those that are part of required courses in the program. Students are also encouraged to take Interprofessional Health and Human Service (IHHS) courses offered through the College of Health Disciplines, all of which are Faculty-approved electives. For more information see IHHS Courses or visit Health Disciplines.

#### **URL:**

http://www.calendar.ubc.ca/vancouver/proof/edit/courses.cfm?page=code&institution=

#### **Proposed Calendar Entry:**

PHAR Pharmaceutical Sciences
PHRM Pharmacy

#### **Present Calendar Entry:**

PHAR Pharmaceutical Sciences

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

- Create a new PHRM subject code to be used by the Faculty of Pharmaceutical Sciences.
- Include new PHRM subject code in the list by Faculty, by Subject Code, and by Subject Name

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

- Existing PHAR 100 to 499 courses will continue to be offered until the current B.Sc.(Pharm) students have completed their program. Existing graduate-level PHAR courses will not be affected by this change.
- New PHRM courses would be used only by the new entry-to-practice Pharm.D. program.



http://www.calendar.ubc.ca/vancouver/pro of/edit/index.cfm?tree=12,213,397,390

#### **Proposed Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Bachelor of Science in Pharmacy > Admission

#### Admission

[New PARA] Important Note: Admission to the Bachelor of Science in Pharmacy (B.Sc. (Pharm.)) is suspended. Applicants interested in an entry-topractice pharmacy degree should consult the admissions requirements for the **Entry-to-Practice < Doctor of Pharmacy>** [link to new section] (Pharm.D.).

To be considered for admission to the fouryear program, a student must...

...information on admission requirements for all applicants is available from the Faculty.

#### **URL:**

http://www.calendar.ubc.ca/vancouver/proo f/edit/index.cfm?tree=12,213,397,390

#### **Present Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Bachelor of Science in Pharmacy > Admission

Admission

To be considered for admission to the fouryear program, a student must...

...information on admission requirements for all applicants is available from the Faculty.

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

- Add a statement (in red) to the beginning of the B.Sc.(Pharm) Admissions section redirecting potential applicants to the Entry-to-Practice Pharm.D. section.
- No change to the B.Sc.(Pharm.) entry, which will be removed from the Calendar at an appropriate later time.

#### **Rationale:**

The Bachelor of Science in Pharmacy is replaced by the Doctor of Pharmacy degree. The last cohort of students following the B.Sc.(Pharm.) curriculum will enter the program in 2014W. The first Pharm.D. cohort will enter the program in 2015W [pending approval of the new



program].

The B.Sc.(Pharm.) section will continue to be published in the Calendar to assist the 2014W and earlier cohorts until they graduate in May 2018. This important note, placed prominently at the beginning of the B.Sc.(Pharm.) admission section, will redirect potential applicants to the new entry-to-practice degree (Pharm.D.) program pages.



## **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)	
Faculty: Pharmaceutical Sciences	<b>Date:</b> 30 August 2013
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 31 Oct 2013	MacDonald
<b>Effective Session (W or S):</b> Winter T1	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: peter.loewen@ubc.ca;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
	Present Calendar Entry:
PHRM 100 (18) Foundations of Pharmacy	N/A
Scientific concepts and pharmacy	
practice principles. Role of the	Type of Action:
pharmacist, patient assessment skills,	Create a new course.
professional identity, communication	
skills, and an understanding of legal and	Rationale for Proposed Change:
ethical responsibilities.	
	The Foundations of Pharmacy course is an
	introduction to key scientific concepts and
	pharmacy practice principles and skills.
	Information is presented in seven modules
	covering concepts in pharmaceutics, drug
	delivery, medicinal chemistry,
	biomolecular chemistry, pharmacology,
	pharmacokinetics, pharmacogenomics,
	anatomy, physiology, pathophysiology,
	epidemiology, critical appraisal, and
	medication therapy management. This
	knowledge forms the basis for Term 2
	Medication Management modules and
	experiential clerkships.
	<b>☒</b> Not available for Cr/D/F grading
	Rationale for not being available for
	Cr/D/F: Cr/D/F grading is not permitted
	for required courses in the Pharm.D.
	program. The course is not open to students
	outside of the program.
	outside of the program.
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading



### **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

**Faculty Approval Date:** 31 Oct 2013 **Effective Session (W or S):** Winter T2 **Effective Academic Year:** 2015/16

**Date:** 30 August 2013

Contact Person: Peter Loewen/Glenda

MacDonald

Phone: PL: 71814; GM:23085 Email: peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

**URL:** PHRM

#### **Proposed Calendar Entry:**

PHRM 111 (15) Medication Management I Modules and integration activities focusing on: an introduction to infectious diseases; musculoskeletal disorders; dermatology; eyes, ears, nose and throat disorders; fluid & electrolytes, and hematology.

#### **Present Calendar Entry:**

N/A

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

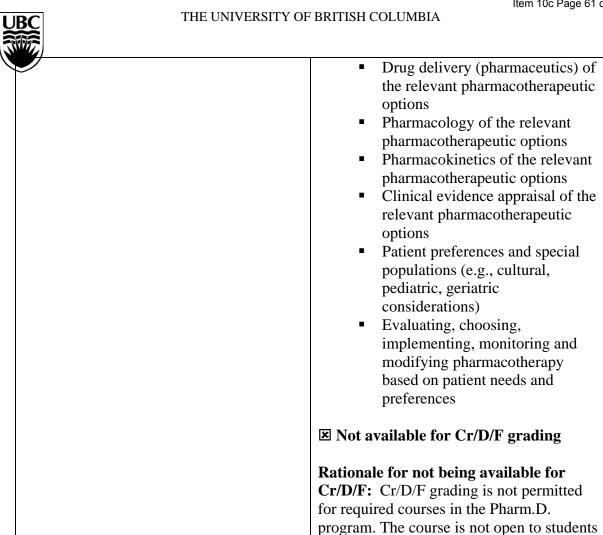
Create a new course.

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

This is the first in a series of five major courses which comprise ~70% of the program curriculum. Students in the program require this course to develop patient care skills required per the program outcomes.

Achieving these outcomes will require acquisition and integration of knowledge or skills across all the Elements of each module, which for each condition are:

- Epidemiology/natural history
- Pathophysiology
- Patient assessment (signs & symptoms, diagnosis, physical assessment, interview assessment)
- Laboratory and other test interpretation
- Staging and severity of the condition
- Professional identity & role, and interprofessional collaboration issues in the management of the condition
- Therapy:
  - o Non-pharmacologic approaches
  - o Pharmacologic approaches:
    - Biomolecular/Medicinal chemistry of the relevant pharmacotherapeutic options



outside of the program.

☐ Pass/Fail or

☐ Honours/Pass/Fail grading



### **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)	<del>-</del>
Faculty: Pharmaceutical Sciences	<b>Date:</b> 30 August 2013
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 31 Oct 2013	MacDonald
<b>Effective Session (W or S):</b> Winter T1	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: peter.loewen@ubc.ca;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
· ·	Present Calendar Entry:
PHRM 131 (2) Study Design and	N/A
Interpretation I	
Principles of clinical study design,	Type of Action:
focusing on biostatistical foundations,	Create a new course.
randomized controlled trials, and	
systematic review of randomized	Rationale for Proposed Change:
controlled trials.	Students in the first professional year of the
	program will develop introductory
	knowledge and skills that are essential for
	understanding and applying published
	evidence of the effects of drug therapy.
	This knowledge will be immediately
	applied in Medication Management courses
	and forms a basis for lifelong learning
	through following the published clinical
	literature.
	<b>☑</b> Not available for Cr/D/F grading
	Rationale for not being available for
	Cr/D/F: Cr/D/F grading is not permitted
	for required courses in the Pharm.D.
	program. The course is not open to students
	outside of the program.
	observe of the program.
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading
	— 1 ass/1 an of — Honours/1 ass/1 an graung



## **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)

Faculty: Phan

Faculty: Pharmaceutical Sciences	Date: 30 August 2013
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 31 Oct 2013	MacDonald
<b>Effective Session (W or S):</b> Winter T1	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: peter.loewen@ubc.ca;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
The state of the s	Present Calendar Entry:
PHRM 141 (2) Seminar: Pharmacists in	N/A
Practice I	11/11
Current and future roles for pharmacists	Type of Action:
and controversies in pharmacy practice.	Create a new course.
and controversies in pitarinacy practice.	Create a new course.
	Rationale for Proposed Change:
	This course will serve as an introduction to
	the profession of pharmacy, and to
	pharmacists in different practice settings.
	This is critical to students' professional
	development and helps to quickly
	enculturate them into the profession. It also
	rapidly introduces them to a variety of
	career options in the profession.
	☑ Not available for Cr/D/F grading
	Rationale for not being available for
	Cr/D/F: Cr/D/F grading is not permitted
	for required courses in the PharmD
	-
	program. The course is not open to students
	outside of the program.
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading



Category: (1)

<b>Faculty:</b> Pharmaceutical Sciences	<b>Date:</b> 30 August 2013
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 31 Oct 2013	MacDonald
<b>Effective Session (W or S):</b> Winter T1	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: <a href="mailto:peter.loewen@ubc.ca">peter.loewen@ubc.ca</a> ;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
	Present Calendar Entry:
	N/A
PHRM 161 (2) Technology in Healthcare	
Knowledge and skills related to the role	Type of Action:
and applications of technology in health	Create a new course.
care.	
	Rationale for Proposed Change:
	The course provides a broad overview of
	the applications of computing in health care
	systems, technologies used by individual
	practitioners to enhance clinical decision-
	making, pharmacy-specific information
	systems and associated technologies, and a
	gateway for learners to use appropriate technologies to enhance their own learning
	and practice. This learning is essential for
	contemporary healthcare practitioners, and
	for a technology-intensive profession like
	pharmacy in particular.
	pharmacy in particular.
	<b>☒</b> Not available for Cr/D/F grading
	Rationale for not being available for
	<b>Cr/D/F:</b> Cr/D/F grading is not permitted
	for required courses in the Pharm.D.
	program. The course is not open to students
	outside of the program.
	Desc/Feil on Honoroo/Desc/Feil on 15
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading



Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

Faculty Approval Date: 31 Oct 2013 Effective Session (W or S): Winter T1 Effective Academic Year: 2015/16

**Date:** 30 August 2013

Contact Person: Peter Loewen/Glenda

MacDonald

**Phone:** PL: 71814: GM:23085 Email: peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

### **Proposed Calendar Entry:**

PHRM 171 (3) Introductory Pharmacy Practice Experience I

Prescription processing, drug distribution systems and select patient care activities in real world environments. Pass/Fail.

**URL: PHRM** 

### **Present Calendar Entry:**

N/A

### **Type of Action:**

Create a new course.

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

This course provides students with 6 weeks of experiential learning in the first professional year. By introducing pharmacy practice skills early in the curriculum, learners are able to develop and practice communication and technical skills, apply knowledge, and make patient care decisions based on clinical competency and professional judgment in real world work environments as soon as possible.

PHRM 171 is the first of three introductory pharmacy practice experience (IPPE) courses (PHRM 171, PHRM 271 and PHRM 371) and one of 6 courses that provide a total of 46 weeks of experiential learning in the curriculum. This meets the accreditation standards for entry-to-practice PharmD programs in Canada (CCAPP) and the United States (ACPE).

**☒** Not available for Cr/D/F grading Rationale for not being available for

**Cr/D/F:** Cr/D/F grading is not permitted for required courses in the PharmD program. The course is not open to students outside of the program.

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



Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

**Faculty Approval Date:** 6 March 2014 **Effective Session (W or S):** Winter **Effective Academic Year:** 2015/16

**Date:** 22 February 2014

Contact Person: Peter Loewen/Glenda

MacDonald

Phone: PL: 71814; GM:23085 Email: peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

**URL:** PHRM

## **Proposed Calendar Entry:**

PHRM 211 (15) Medication Management II

Modules and integration activities focusing on respirology and cardiovascular disorders.

## **Present Calendar Entry:**

N/A

## Type of Action:

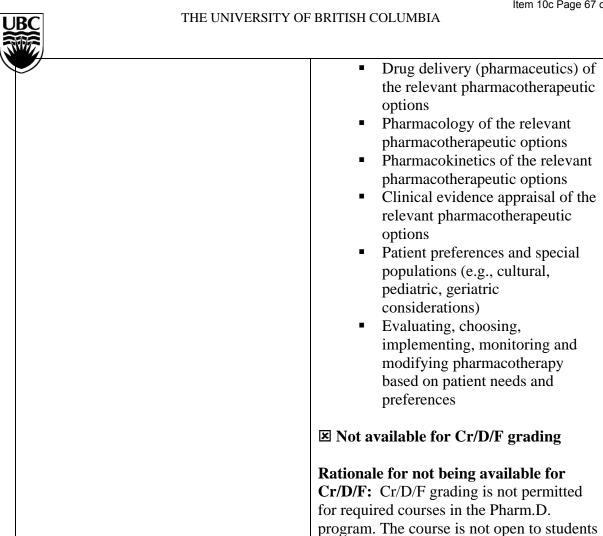
Create a new course.

## **Rationale for Proposed Change:**

This is the second in a series of five major courses which comprise ~70% of the program curriculum. Students in the program require this course to develop patient care skills required per the program outcomes.

Achieving these outcomes will require acquisition and integration of knowledge or skills across all the Elements of each module, which for each condition are:

- Epidemiology/natural history
- Pathophysiology
- Patient assessment (signs & symptoms, diagnosis, physical assessment, interview assessment)
- Laboratory and other test interpretation
- Staging and severity of the condition
- Professional identity & role, and interprofessional collaboration issues in the management of the condition
- Therapy:
  - o Non-pharmacologic approaches
  - o Pharmacologic approaches:
    - Biomolecular/Medicinal chemistry of the relevant pharmacotherapeutic options



outside of the program.

☐ Pass/Fail or

☐ Honours/Pass/Fail grading



Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

**Faculty Approval Date:** 6 March 2014 **Effective Session (W or S):** Winter **Effective Academic Year:** 2015/16

Date: 22 February 2014

Contact Person: Peter Loewen/Glenda

MacDonald

**Phone:** PL: 71814; GM:23085 **Email:** peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

**URL:** PHRM

## **Proposed Calendar Entry:**

PHRM 212 (15) Medication Management III

Modules and integration activities focusing on nephrology, endocrinology, and neurology.

## **Present Calendar Entry:**

N/A

## Type of Action:

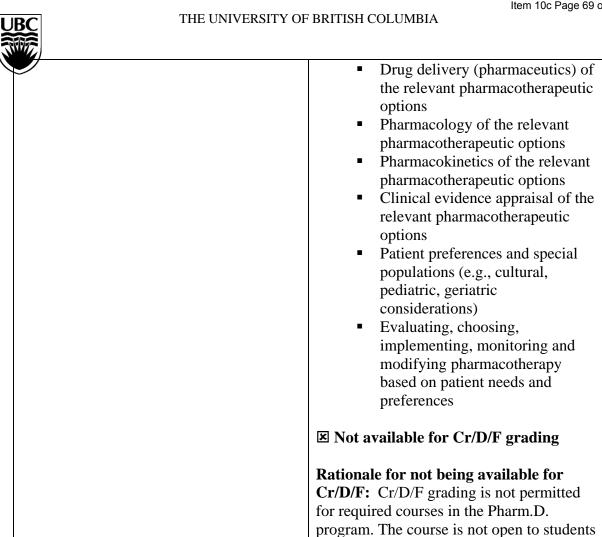
Create a new course.

## **Rationale for Proposed Change:**

This is the third in a series of five major courses which comprise ~70% of the program curriculum. Students in the program require this course to develop patient care skills required per the program outcomes.

Achieving these outcomes will require acquisition and integration of knowledge or skills across all the Elements of each module, which for each condition are:

- Epidemiology/natural history
- Pathophysiology
- Patient assessment (signs & symptoms, diagnosis, physical assessment, interview assessment)
- Laboratory and other test interpretation
- Staging and severity of the condition
- Professional identity & role, and interprofessional collaboration issues in the management of the condition
- Therapy:
  - o Non-pharmacologic approaches
  - o Pharmacologic approaches:
    - Biomolecular/Medicinal chemistry of the relevant pharmacotherapeutic options



outside of the program.

☐ Pass/Fail or

☐ Honours/Pass/Fail grading



Category: (1)

Faculty: Pharmaceutical Sciences	Date: 22 February 2014
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 6 March 2014	MacDonald
<b>Effective Session (W or S):</b> Winter	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: <a href="mailto:peter.loewen@ubc.ca">peter.loewen@ubc.ca</a> ;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
	Present Calendar Entry:
PHRM 221 (3) Nutrition for Pharmacists	N/A
Foundations of nutrition, nutrition for	
healthy individuals through the lifespan,	Type of Action:
and selected clinical applications of	Create a new course.
nutrition in pharmacy practice.	D. C. and C. D. and J. Cl.
	Rationale for Proposed Change:
	In practice, pharmacists are required to draw upon nutrition knowledge to
	provide care individuals in health and
	disease.
	discuse.
	A focused course on nutrition in 2 <sup>nd</sup> year of
	the program provides a foundation for
	learning in later medication management
	modules and in experiential learning
	settings.
	<b>☒</b> Not available for Cr/D/F grading
	Rationale for not being available for
	Cr/D/F: Cr/D/F grading is not permitted
	for required courses in the PharmD
	program. The course is not open to students
	outside of the program.
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading



Category: (1)

Faculty: Pharmaceutical Sciences

Faculty: Pharmaceutical Sciences	<b>Date:</b> 18 February 2014
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 6 March 2014	MacDonald
Effective Session (W or S): Winter	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: peter.loewen@ubc.ca;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
T and a second	Present Calendar Entry:
PHRM 231 (2) Study Design and	N/A
Interpretation II	
Principles of clinical study design,	Type of Action:
focusing on epidemiologic studies	Create a new course.
(cohort, case-control),	
pharmacoeconomic analyses, non-	Rationale for Proposed Change:
inferiority designs, clinical prediction	Students in the second professional year of
rules, and guidelines.	the program will develop intermediate to
	advanced knowledge and skills that are
	essential for understanding and applying
	published evidence of the effects of drug
	therapy. This knowledge will be
	immediately applied in Medication
	Management courses and forms a basis for
	lifelong learning through following the
	published clinical literature.
	published enfined fiterature.
	☑ Not available for Cr/D/F grading
	Rationale for not being available for
	Cr/D/F: Cr/D/F grading is not permitted
	for required courses in the Pharm.D.
	program. The course is not open to students
	outside of the program.
	outside of the program.
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading



Category: (1)

Faculty: Pharmaceutical Sciences

Faculty: Pharmaceutical Sciences	Date: 18 February 2014
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 6 March 2014	MacDonald
Effective Session (W or S): Winter	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: peter.loewen@ubc.ca;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
	Present Calendar Entry:
PHRM 241 (2) Seminar: Pharmacists in	N/A
Practice II	
Current and future roles for pharmacists	Type of Action:
and controversies in pharmacy practice,	Create a new course.
focusing on the roles and training	
opportunities for pharmacists in	Rationale for Proposed Change:
specialty areas of outpatient and	This course continues the introduction to
inpatient practice.	the profession of pharmacy, and to
	pharmacists in different practice settings
	that students were first exposed to in
	PHRM 141. This is critical to students'
	professional development and helps to
	enculturate them into the profession. It also
	introduces them to a variety of career
	options in the profession.
	☑ Not available for Cr/D/F grading
	Rationale for not being available for
	Cr/D/F: Cr/D/F grading is not permitted
	for required courses in the PharmD
	program. The course is not open to students
	outside of the program.
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading
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Category: (1)	
Faculty: Pharmaceutical Sciences	<b>Date:</b> 18 February 2014
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 6 March 2014	MacDonald
Effective Session (W or S): Winter	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: peter.loewen@ubc.ca;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
	Present Calendar Entry:
	N/A
PHRM 251 (1) Institutional Practice Skills	
Preparation for experiential learning in	Type of Action:
the hospital setting. Focuses on	Create a new course.
enhancing familiarity with the care	
environment and developing skills	Rationale for Proposed Change:
suited for students to apply to patient	Students require special emphasis on the
care during institutional experiential	unique aspects of practicing in the complex
rotations.	environment of hospitals. This course is
	designed to enhance their readiness to
	practice in that environment. This enhances
	patient care and maximizes the learning
	potential of the preceptor-student
	relationship.
	☑ Not available for Cr/D/F grading
	Rationale for not being available for
	<b>Cr/D/F:</b> Cr/D/F grading is not permitted
	for required courses in the Pharm.D.
	program. The course is not open to students
	outside of the program.
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading
	— Tussiran of — Honoursi assiran grauling



Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

**Faculty Approval Date:** 6 March 2014 **Effective Session (W or S):** Winter **Effective Academic Year:** 2015/16

## **Proposed Calendar Entry:**

PHRM 271 (4) Introductory Pharmacy Practice Experience II

Longitudinal community service learning and block clerkships in inpatient and outpatient settings. Focus on direct patient care activities. Pass/Fail.

**Date:** 18 February 2014

Contact Person: Peter Loewen/Glenda

MacDonald

Phone: PL: 71814; GM:23085 Email: peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

**URL:** PHRM

**Present Calendar Entry:** 

N/A

**Type of Action:** Create a new course.

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

This course provides students with 8 weeks of experiential learning in the second professional year (PY). Students will accumulate 2 weeks of out-patient (community pharmacy, community service learning) experiences longitudinally through the Winter Session, be introduced to hospital practice through a 2-week block experience, and complete a 4-week out-patient block in the summer between PY2 and PY3.

PHRM 271 is the second of three introductory pharmacy practice experience (IPPE) courses (PHRM 171, PHRM 271 and PHRM 371) and one of 6 courses that provide a total of 46 weeks of experiential learning in the curriculum. This meets the accreditation standards for entry-to-practice PharmD programs in Canada (CCAPP) and the United States (ACPE).

## **☒** Not available for Cr/D/F grading Rationale for not being available for

**Cr/D/F:** Cr/D/F grading is not permitted for required courses in the PharmD program. The course is not open to students outside of the program.

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



Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

**Faculty Approval Date:** 6 March 2014 **Effective Session (W or S):** Winter **Effective Academic Year:** 2015/16

**Date:** 20 February 2014 **Contact Person:** Peter I

Contact Person: Peter Loewen/Glenda

MacDonald

**Phone:** PL: 71814; GM: 23085 **Email:** peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

## **Proposed Calendar Entry:**

PHRM 311 (12) Medication Management IV

Modules and integration activities focusing on psychiatry; gastroenterology; and obstetrics, gynecology, sexual health and genitourinary disorders.

**URL: PHRM** 

**Present Calendar Entry:** N/A

## Type of Action:

Create a new course.

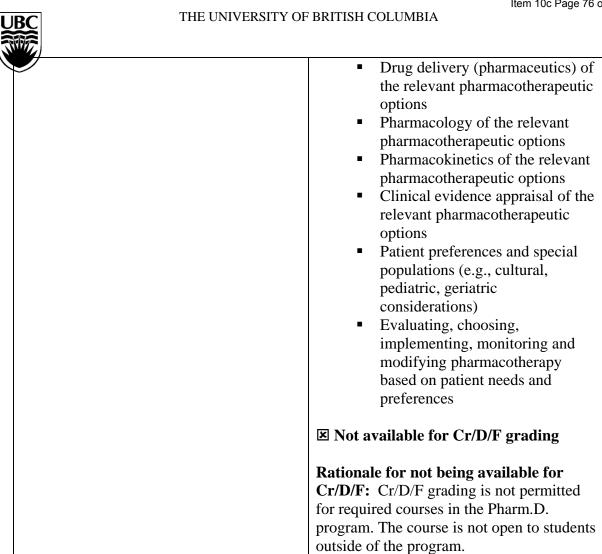
### **Rationale for Proposed Change:**

This is the fourth in a series of five major courses which comprise ~70% of the program curriculum. Students in the program require this course to develop patient care skills required per the program outcomes.

Achieving these outcomes will require acquisition and integration of knowledge or skills across all the Elements of each module, which for each condition are:

- Epidemiology/natural history
- Pathophysiology
- Patient assessment (signs & symptoms, diagnosis, physical assessment, interview assessment)
- Laboratory and other test interpretation
- Staging and severity of the condition
- Professional identity & role, and interprofessional collaboration issues in the management of the condition
- Therapy:
  - o Non-pharmacologic approaches
  - o Pharmacologic approaches:
    - Biomolecular/Medicinal chemistry of the relevant pharmacotherapeutic options

☐ Honours/Pass/Fail grading



☐ Pass/Fail or



Category: (1)

**Faculty:** Pharmaceutical Sciences

**Department:** n/a

Faculty Approval Date: 6 March 2014 Effective Session (W or S): Winter Effective Academic Year: 2015/16 **Date:** 18 February 2014

Contact Person: Peter Loewen/Glenda

MacDonald

Phone: PL: 71814; GM:23085 Email: peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

**URL:** PHRM

## **Proposed Calendar Entry:**

PHRM 312 (12) Medication Management V

Modules and integration activities focusing on special infectious diseases; toxicology; and oncology and palliative care.

## **Present Calendar Entry:**

N/A

## Type of Action:

Create a new course.

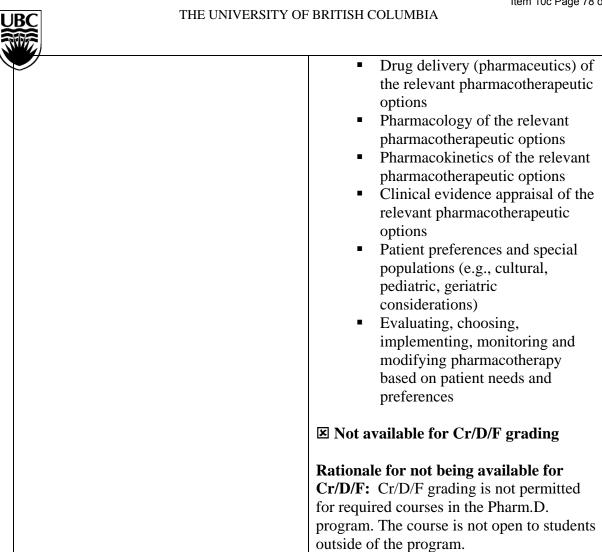
## **Rationale for Proposed Change:**

This is the last in a series of five major courses which comprise ~70% of the program curriculum. Students in the program require this course to develop patient care skills required per the program outcomes.

Achieving these outcomes will require acquisition and integration of knowledge or skills across all the Elements of each module, which for each condition are:

- Epidemiology/natural history
- Pathophysiology
- Patient assessment (signs & symptoms, diagnosis, physical assessment, interview assessment)
- Laboratory and other test interpretation
- Staging and severity of the condition
- Professional identity & role, and interprofessional collaboration issues in the management of the condition
- Therapy:
  - o Non-pharmacologic approaches
  - o Pharmacologic approaches:
    - Biomolecular/Medicinal chemistry of the relevant pharmacotherapeutic options

☐ Honours/Pass/Fail grading



☐ Pass/Fail or



Category: (1)

Faculty: Pharmaceutical Sciences	Date: 21 February 2014
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 6 March 2014	MacDonald
<b>Effective Session (W or S):</b> Winter	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: peter.loewen@ubc.ca;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
	Present Calendar Entry:
PHRM 341 (2) Seminar: Pharmacists in	N/A
Practice III	
Current and potential roles for	Type of Action:
pharmacists, and contemporary issues in	Create a new course.
pharmacy practice. Focus on the role of	
pharmacists as patient educators,	Rationale for Proposed Change:
researchers and collaborators in	This course builds upon PHRM 141 and
interprofessional teams.	PHRM 241 discussions regarding the role
	of pharmacists in different practice settings.
	As students progress through the program
	they become familiar with potential career
	options, as well as current issues and
	controversies in the profession. This
	seminar focuses on the roles of pharmacists
	as patient educators, researchers, and as
	members of interprofessional healthcare
	teams.
	☑ Not available for Cr/D/F grading
	Rationale for not being available for
	Cr/D/F: Cr/D/F grading is not permitted
	for required courses in the PharmD
	program. The course is not open to students
	outside of the program.
	r
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading



Category: (1)

**Faculty:** Pharmaceutical Sciences

**Department:** n/a

**Faculty Approval Date:** 6 March 2014 **Effective Session (W or S):** Winter **Effective Academic Year:** 2015/16

glenda.macdo: URL: PHRM

**Proposed Calendar Entry:** 

PHRM 351 (3) Practice Management and Leadership

Application of management and leadership principles and skills to pharmacy operations.

**Date:** 21 February 2014

Contact Person: Peter Loewen/Glenda

MacDonald

**Phone:** PL: 71814; GM:23085 **Email:** peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

**Present Calendar Entry:** 

N/A

Type of Action:

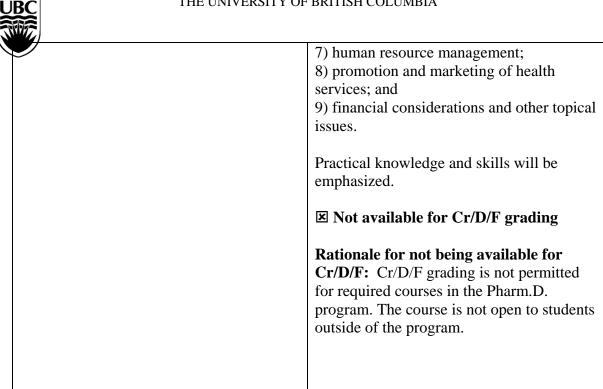
Create a new course.

## **Rationale for Proposed Change:**

Course content will help students to manage their pharmacy practice. This course also helps students acknowledge, identify and understand the various challenges and opportunities associated with the pharmacist's role as a manager, collaborator, communicator and provider of patient care, as well as to explore the values, concepts, issues and responsibilities of individuals exercising administrative and leadership roles in pharmacy practice and other health care settings. Health care, economics, professional, industry, and regulatory factors that influence practice and medication use in organized health care settings will be discussed by representatives from various segments of the health care system.

The themes include:

- 1) federal and provincial health care systems;
- 2) professional practice topics;
- 3) pharmaceutical policy;
- 4) health economics and sustainable healthcare:
- 5) prescribing behaviour;
- 6) ethics and conflicts of interest;



☐ Pass/Fail or

☐ Honours/Pass/Fail grading



Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

Faculty Approval Date: 6 March 2014 Effective Session (W or S): Winter **Effective Academic Year:** 2015/16

Date: 21 February 2014

Contact Person: Peter Loewen/Glenda

MacDonald

**Phone:** PL: 71814: GM:23085 Email: peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

### **Proposed Calendar Entry:**

PHRM 371 (4) Introductory Pharmacy Practice Experience III

Direct patient care activities in an outpatient setting. Building on existing pharmaceutical knowledge and problem solving ability. Increased involvement in diverse patient care situations. Pass/Fail.

## **URL: PHRM**

### **Present Calendar Entry:**

N/A

### **Type of Action:**

Create a new course.

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

This course provides students with 8 weeks of experiential learning in the third professional year (PY). Students will complete an 8-week outpatient block in the summer between PY3 and PY4.

PHRM 371 is the last of three introductory pharmacy practice experience (IPPE) courses (PHRM 171, PHRM 271 and PHRM 371) and one of 6 courses that provide a total of 46 weeks of experiential learning in the curriculum. This meets the accreditation standards for entry-to-practice PharmD programs in Canada (CCAPP) and the United States (ACPE).

## **☒** Not available for Cr/D/F grading Rationale for not being available for

**Cr/D/F:** Cr/D/F grading is not permitted for required courses in the PharmD program. The course is not open to students outside of the program.

×	Pass/Fail or		Honours/Pass/Fail gradin
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Category: (1)

<b>Faculty:</b> Pharmaceutical Sciences	<b>Date:</b> 21 February 2014
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 6 March 2014	MacDonald
Effective Session (W or S): Winter	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: <a href="mailto:peter.loewen@ubc.ca">peter.loewen@ubc.ca</a> ;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
	Present Calendar Entry:
PHRM 441 (1) Seminar: Advanced Topics	N/A
in Pharmacy Practice	
Roles and skills for pharmacists as	Type of Action:
preceptors, teachers and mentors;	Create a new course.
emerging issues in pharmacy practice.	
	Rationale for Proposed Change:
	This course focuses on theory, skills and
	opportunities for pharmacists as preceptors,
	teachers and mentors. The course, fourth in
	a series of seminar courses begun in the
	first year, continues discussions of current
	controversies in pharmacy practice.
	<b>☑</b> Not available for Cr/D/F grading
	Rationale for not being available for
	<b>Cr/D/F:</b> Cr/D/F grading is not permitted
	for required courses in the PharmD
	program. The course is not open to students
	outside of the program.
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading
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Category: (1)

**Faculty:** Pharmaceutical Sciences

**Department:** n/a

Faculty Approval Date: 6 March 2014 Effective Session (W or S): Winter Effective Academic Year: 2015/16

## **Proposed Calendar Entry:**

PHRM 471 (16) Outpatient Advanced Pharmacy Practice Experience

Application of integrated problemsolving skills to resolve increasingly complex drug-therapy problems in outpatient settings. Patient care will be provided for a wide range of therapeutic areas. Pass/Fail.

Date: 21 February 2014

Contact Person: Peter Loewen/Glenda

MacDonald

**Phone:** PL: 71814: GM:23085 Email: peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

**URL: PHRM** 

### **Present Calendar Entry:**

N/A

### **Type of Action:**

Create a new course.

## **Rationale for Proposed Change:**

This course provides students with 12 weeks of experiential learning in the fourth professional year (PY). Students will complete a 12-week outpatient block in either Terms 1 or 2 of the Winter Session in PY4.

PHRM 471 is one of three advanced pharmacy practice experience (APPE) courses (PHRM 471, PHRM 472 and PHRM 473) and one of 6 courses that provide a total of 46 weeks of experiential learning in the curriculum. This meets the accreditation standards for entry-to-practice PharmD programs in Canada (CCAPP) and the United States (ACPE).

## **☒** Not available for Cr/D/F grading Rationale for not being available for

**Cr/D/F:** Cr/D/F grading is not permitted for required courses in the PharmD program. The course is not open to students outside of the program.

	<b>X</b>	Pass/Fail or	П	Honours/Pass/Fail	aradin
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Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

Faculty Approval Date: 6 March 2014 Effective Session (W or S): Winter Effective Academic Year: 2015/16

Date: 21 February 2014

Contact Person: Peter Loewen/Glenda

MacDonald

**Phone:** PL: 71814: GM:23085 Email: peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

**URL: PHRM** 

## **Proposed Calendar Entry:**

PHRM 472 (10) Inpatient Advanced Pharmacy Practice Experience

Application of integrated problemsolving skills to resolve increasingly complex drug-therapy problems in inpatient settings. Patient care will be provided for a wide range of therapeutic areas. Pass/Fail.

## **Present Calendar Entry:**

N/A

## **Type of Action:**

Create a new course.

## **Rationale for Proposed Change:**

This course provides students with 8 weeks of experiential learning in the fourth professional year (PY). Students will complete an 8-week inpatient block in either Terms 1 or 2 of the Winter Session in PY4.

PHRM 472 is one of three advanced pharmacy practice experience (APPE) courses (PHRM 471, PHRM 472 and PHRM 473) and one of 6 courses that provide a total of 46 weeks of experiential learning in the curriculum. This meets the accreditation standards for entry-to-practice PharmD programs in Canada (CCAPP) and the United States (ACPE).

## **☒** Not available for Cr/D/F grading Rationale for not being available for

**Cr/D/F:** Cr/D/F grading is not permitted for required courses in the PharmD program. The course is not open to students outside of the program.

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



Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

**Faculty Approval Date:** 6 March 2014 **Effective Session (W or S):** Winter **Effective Academic Year:** 2015/16

**Date:** 21 February 2014

Contact Person: Peter Loewen/Glenda

MacDonald

Phone: PL: 71814; GM:23085 Email: peter.loewen@ubc.ca; glenda.macdonald@ubc.ca

**URL:** PHRM

## **Proposed Calendar Entry:**

PHRM 473 (5) Selected Advanced Pharmacy Practice Experience

Required 4-week experiential clerkship in an area chosen by the student. Diverse options available in such domains as patient care (various settings), research, health policy, education, and others. The available placement options will vary from year to year depending on site/preceptor availability. Pass/Fail.

## **Present Calendar Entry:**

N/A

### **Type of Action:**

Create a new course.

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

This course provides students with 4 weeks of experiential learning in the fourth professional year (PY4). This course provides the opportunity for students to choose either a patient care or non patient care clerkship and to select the focus area for that clerkship (e.g., nephrology, research).

PHRM 473 is one of 6 courses that provide a total of 46 weeks of experiential learning in the curriculum. This meets the accreditation standards for entry-to-practice PharmD programs in Canada (CCAPP) and the United States (ACPE).

## **☒** Not available for Cr/D/F grading Rationale for not being available for

**Cr/D/F:** Cr/D/F grading is not permitted for required courses in the PharmD program. The course is not open to students outside of the program.

➤ Pass/Fail or ☐ Honour	s/Pass/Fail	gradin
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Category: (1)

Faculty: Pharmaceutical Sciences	<b>Date:</b> 21 February 2014
<b>Department:</b> n/a	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 6 March 2014	MacDonald
Effective Session (W or S): Winter	<b>Phone:</b> PL: 71814; GM:23085
Effective Academic Year: 2015/16	Email: peter.loewen@ubc.ca;
	glenda.macdonald@ubc.ca
	URL: PHRM
Proposed Calendar Entry:	
	<b>Present Calendar Entry:</b>
	N/A
PHRM 481 (2) Healthcare Quality	
Improvement	Type of Action:
Builds on the foundation of patient care	Create a new course.
and management learning with	
knowledge about healthcare system	<b>Rationale for Proposed Change:</b>
improvement. Focuses on principles of	Essential learning for healthcare
quality measurement and quality	professionals and is necessary for several
improvement in health.	of the program's learning
	outcomes/competencies.
	The course will define continuous quality improvement in a healthcare context, and cover topics such as the history of quality of care, classifying and reducing medical errors, measuring quality of care, models of quality improvement, solutions and challenges raised by information technology improvements and access, managing risk in healthcare systems, and case studies in healthcare quality improvement.  E Not available for Cr/D/F grading
	Rationale for not being available for Cr/D/F: Cr/D/F grading is not permitted for required courses in the Pharm.D. program. The course is not open to students outside of the program.  □ Pass/Fail or □ Honours/Pass/Fail grading



Office of the Senate

Brock Hall | 2016 - 1874 East Mall Vancouver BC V6T 1Z1

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

19 March 2014

To: Vancouver Senate

From: Senate Curriculum Committee

Re: March Curriculum Proposals (approval)

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

The following is recommended to Senate:

**Motion:** "That the new courses, revised courses, and revised programs brought

forward by the Faculty of Graduate and Postdoctoral Studies (Arts,

Dentistry, and Land and Food Systems) be approved."

Respectfully submitted,

Dr. Peter Marshall, Chair

Senate Curriculum Committee



#### FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES

Arts (Page 3 of 30)

New courses

CRWR 502 (3-12)d, 508 (3-12)d, 551 (3-12)d, 552 (3-12)d, 556 (3-12)d, 557 (3-12)d, 558 (3-12)d, 559 (3-12)d, 561 (3-12)d

**Dentistry** (Page 21 of 30)

Revised program, new and revised courses

MSc Craniofacial Science Program Requirements; DENT 539 (3), 540 (3)

Land and Food Systems (Page 25 of 30)

Revised program, new courses

Master of Land and Water Systems Program Requirements; SOIL 510 (2), 550 (3)



Category: 1

**Faculty:** Arts

**Department:** Creative Writing

Faculty Approval Date: October 15, 2013

Effective Session (W or S): W Effective Academic Year: 2014 **Date: 22 March 2013** 

**Contact Person:** Steven Galloway

**Phone:** 604-822-6273

Email: steven.galloway@ubc.ca

**Proposed Calendar Entry:** 

CRWR 502 (3-12) d Advanced Writing for New Media I

**Type of Action:** Create New Course

**Rationale for Proposed Change:** 

We currently run such a class as a Special Projects class, but the lack of clarity this provides on a student's transcript makes this a less than ideal situation. This is, in effect, not a proposal for a new course so much as it is a proposal to have a proper number and classification for work already being done under the umbrella of Special Projects. The addition of this course will give us a course number that accurately reflects work already being done within our program.

Writing for New Media is one of the more vibrant and evolving areas of Creative Writing. For the Creative Writing Program to remain relevant and engaged with current practice in creative forms, we must engage with these new types of writing and offer our students the opportunity to develop their skills in these areas. New Media is by definition a constantly evolving area; currently, this may include web-series, blogging, material for twitter and other social media, site specific installations, and video games.

The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process,



students learn how to become more effective writers, editors and critical thinkers. This process is naturally learnercentered, collaborative and requires a high degree of student engagement.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.



Category: 1

Faculty: Arts

**Department:** Creative Writing

Faculty Approval Date: October 15, 2013

Effective Session (W or S): W Effective Academic Year: 2014 **Date: 22 March 2013** 

**Contact Person:** Steven Galloway

**Phone:** 604-822-6273

Email: steven.galloway@ubc.ca

**Proposed Calendar Entry:** 

CRWR 508 (3-12) d Advanced Writing

for Graphic Forms I

**Present Calendar Entry:** 

CRWR 508 (6) Advanced Writing of the

Novella or Novel

**Type of Action:** Create new course (new title and content) under existing course

number.

**Rationale for Proposed Change:** 

We require a level I workshop class in writing for graphic forms. We currently run such a class as a Special Projects class, but the lack of clarity this provides on a student's transcript makes this a less than ideal situation. This is, in effect, not a proposal for a new course so much as it is a proposal to have a proper number and classification for work already being done under the umbrella of Special Projects. The addition of this course will give us a course number that accurately reflects work already being done within our program.

The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process, students learn how to become more effective writers, editors and critical thinkers. This process is naturally learner-centered, collaborative and requires a high degree of student engagement.



In recent years graphica (graphic novels, memoirs and short form narratives) has emerged as one of the fastest growing and innovative forms of Creative Writing. Our Program has produced a number of nationally and internationally recognized authors of work for graphic forms, and it is our wish to continue to support these students who show excellence in this form. Graphic forms include comics, cartoons, and book length graphic works, be they fiction, nonfiction including memoir and biography, or other genres.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.



## **UBC Curriculum Proposal Form Change to Course or Program**

Category: 1

Faculty: Arts

**Department:** Creative Writing

Faculty Approval Date: October 15, 2013

Effective Session (W or S): W Effective Academic Year: 2014 **Date: 22 March 2013** 

**Contact Person:** Steven Galloway

**Phone:** 604-822-6273

Email: steven.galloway@ubc.ca

**Proposed Calendar Entry:** 

**Type of Action:** Create New Course

CRWR 551 (3-12) d Advanced Writing Poetry II

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

We require a level II workshop class as a progression from CRWR 501: Advanced Writing Poetry I. We currently run such a class as a Special Projects class, but the lack of clarity this provides on a student's transcript makes this a less than ideal situation. This is, in effect, not a proposal for a new course so much as it is a proposal to have a proper number and classification for work already being done under the umbrella of Special Projects. The addition of this course will give us a course number that accurately reflects work already being done within our program.

Many students will take CRWR 501 in advance of this course, but it is not a prerequisite as some of our MFA students work at an advanced enough level upon entry that the level I course is not necessary. Where possible we group students with peers of equivalent ability.

The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process, students learn how to become more effective writers, editors and critical thinkers. This process is naturally learner-centered, collaborative and requires a high



degree of student engagement.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.



## **UBC Curriculum Proposal Form Change to Course or Program**

Category: 1

Faculty: Arts

**Department:** Creative Writing

Faculty Approval Date: October 15, 2013

Effective Session (W or S): W Effective Academic Year: 2014 **Date: 22 March 2013** 

**Contact Person:** Steven Galloway

**Phone:** 604-822-6273

Email: steven.galloway@ubc.ca

**Proposed Calendar Entry:** 

Type of Action: Create New Course

CRWR 552 (3-12) d Advanced Writing for New Media II

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

We currently run such a class as a Special Projects class, but the lack of clarity this provides on a student's transcript makes this a less than ideal situation. This is, in effect, not a proposal for a new course so much as it is a proposal to have a proper number and classification for work already being done under the umbrella of Special Projects. The addition of this course will give us a course number that accurately reflects work already being done within our program.

This class assumes more experience in Writing for New Media that CRWR 502.

Writing for New Media is one of the more vibrant and evolving areas of Creative Writing. For the Creative Writing Program to remain relevant and engaged with current practice in creative forms, we must engage with these new types of writing and offer our students the opportunity to develop their skills in these areas.

The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process, students learn how to become more effective writers, editors and critical



thinkers. This process is naturally learnercentered, collaborative and requires a high degree of student engagement.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.



## **UBC Curriculum Proposal Form Change to Course or Program**

Category: 1

Faculty: Arts

**Department:** Creative Writing

Faculty Approval Date: October 15, 2013

Effective Session (W or S): W Effective Academic Year: 2014 **Date: 22 March 2013** 

**Contact Person:** Steven Galloway

**Phone:** 604-822-6273

Email: steven.galloway@ubc.ca

**Proposed Calendar Entry:** 

**Type of Action:** Create New Course

CRWR 556 (3-12) d Advanced Writing for the Screen II

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

We require a level II workshop class as a progression from CRWR 506: Advanced Writing for the Screen I. We currently run such a class as a Special Projects class, but the lack of clarity this provides on a student's transcript makes this a less than ideal situation. This is, in effect, not a proposal for a new course so much as it is a proposal to have a proper number and classification for work already being done under the umbrella of Special Projects. The addition of this course will give us a course number that accurately reflects work already being done within our program.

Many students will take CRWR 506 in advance of this course, but it is not a prerequisite as some of our MFA students work at an advanced enough level upon entry that the level I course is not necessary. Where possible we group students with peers of equivalent ability.

The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process, students learn how to become more effective writers, editors and critical thinkers. This process is naturally learner-centered, collaborative and requires a high



degree of student engagement.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.



# **UBC Curriculum Proposal Form Change to Course or Program**

Category: 1

Faculty: Arts

**Department:** Creative Writing **Faculty Approval Date:** October 15, 2013

Effective Session (W or S): W

**Effective Academic Year: 2014** 

**Date: 22 March 2013** 

**Contact Person:** Steven Galloway

**Phone:** 604-822-6273

Email: steven.galloway@ubc.ca

**Proposed Calendar Entry:** 

**Type of Action:** Create New Course

CRWR 557 (3-12) d Advanced Writing of Drama for the Stage II

## **Rationale for Proposed Change:**

We require a level II workshop class as a progression from CRWR 507: Writing Drama for the Stage I. We currently run such a class as a Special Projects class, but the lack of clarity this provides on a student's transcript makes this a less than ideal situation. This is, in effect, not a proposal for a new course so much as it is a proposal to have a proper number and classification for work already being done under the umbrella of Special Projects. The addition of this course will give us a course number that accurately reflects work already being done within our program.

Many students will take CRWR 507 in advance of this course, but it is not a prerequisite as some of our MFA students work at an advanced enough level upon entry that the level I course is not necessary. Where possible we group students with peers of equivalent ability.

The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process, students learn how to become more effective writers, editors and critical thinkers. This process is naturally learner-centered, collaborative and requires a high



degree of student engagement.

This class will also utilize studio work in the teaching of writing for the stage. Working with actors, directors and technicians is an essential part of writing for the stage, and through staged readings and skeletal productions this course will give the student experience in these elements of the craft.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.



# **UBC Curriculum Proposal Form Change to Course or Program**

Category: 1

Faculty: Arts

**Department:** Creative Writing

Faculty Approval Date: October 15, 2013

Effective Session (W or S): W Effective Academic Year: 2014 **Date:** 22 March 2013

**Contact Person:** Steven Galloway

**Phone:** 604-822-6273

Email: steven.galloway@ubc.ca

**Proposed Calendar Entry:** 

**Type of Action:** Create New Course

CRWR 558 (3-12) d Advanced Writing for Graphic Forms II

## **Rationale for Proposed Change:**

We require a level II workshop class as a progression from CRWR 508: Advanced Writing for Graphic Forms I. We currently run such a class as a Special Projects class, but the lack of clarity this provides on a student's transcript makes this a less than ideal situation. This is, in effect, not a proposal for a new course so much as it is a proposal to have a proper number and classification for work already being done under the umbrella of Special Projects. The addition of this course will give us a course number that accurately reflects work already being done within our program.

Many students will take CRWR 508 in advance of this course, but it is not a prerequisite as some of our MFA students work at an advanced enough level upon entry that the level I course is not necessary. Where possible we group students with peers of equivalent ability.

The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process, students learn how to become more effective writers, editors and critical thinkers. This process is naturally learner-centered, collaborative and requires a high



degree of student engagement.

In recent years graphica (graphic novels, memoirs and short form narratives) has emerged as one of the fastest growing and innovative forms of Creative Writing. Our Program has produced a number of nationally and internationally recognized authors of work for graphic forms, and it is our wish to continue to support these students who show excellence in this form. Graphic forms include comics, cartoons, and book length graphic works, be they fiction, nonfiction including memoir and biography, or other genres.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.



Category: 1

Faculty: Arts

**Department:** Creative Writing

Faculty Approval Date: October 15, 2013

Effective Session (W or S): W Effective Academic Year: 2014 **Date: 22 March 2013** 

**Contact Person:** Steven Galloway

**Phone:** 604-822-6273

Email: steven.galloway@ubc.ca

**Proposed Calendar Entry:** 

**Type of Action:** Create New Course

CRWR 559 (3-12) d Advanced Writing Fiction II

## **Rationale for Proposed Change:**

We require a level II workshop class as a progression from CRWR 509: Advanced Writing Fiction I. We currently run such a class as a Special Projects class, but the lack of clarity this provides on a student's transcript makes this a less than ideal situation. This is, in effect, not a proposal for a new course so much as it is a proposal to have a proper number and classification for work already being done under the umbrella of Special Projects. The addition of this course will give us a course number that accurately reflects work already being done within our program.

Many students will take CRWR 509 in advance of this course, but it is not a prerequisite as some of our MFA students work at an advanced enough level upon entry that the level I course is not necessary. Where possible we group students with peers of equivalent ability.

The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process, students learn how to become more effective writers, editors and critical thinkers. This process is naturally learner-centered, collaborative and requires a high



degree of student engagement.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.



Category: 1

**Faculty:** Arts **Date: 22 March 2013** 

**Department:** Creative Writing **Contact Person:** Steven Galloway Faculty Approval Date: October 15, 2013 **Phone:** 604-822-6273

Effective Session (W or S): W Email: steven.galloway@ubc.ca **Effective Academic Year: 2014** 

**Proposed Calendar Entry:** 

**Type of Action:** Create New Course

CRWR 561 (3-12) d Advanced Writing for Lyric Forms II

**Rationale for Proposed Change:** 

We require a level II workshop class as a progression from CRWR 511: Advanced Writing for Lyric Forms I. [Note: At time of submission of this proposal CRWR 511 was titled Advanced Writing for Lyrics and Libretti. The New Programs and Curriculum Committee requested a Category 2 proposal to bring the title in line with CRWR 561.] We currently run such a class as a Special Projects class, but the lack of clarity this provides on a student's transcript makes this a less than ideal situation. The addition of this course will give us a course number that accurately reflects work already being done within our program.

Many students will take CRWR 511 in advance of this course, but it is not a prerequisite as some of our MFA students work at an advanced enough level upon entry that the level I course is not necessary. Where possible we group students with peers of equivalent ability.

The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process, students learn how to become more effective writers, editors and critical



thinkers. This process is naturally learnercentered, collaborative and requires a high degree of student engagement.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.



Category: (1)

**Faculty:** Dentistry

**Department:** Craniofacial Science Faculty Approval Date: September 12,

2013

**Effective Session (W or S): S Effective Academic Year: 2014**  Date: February 7, 2014

**Contact Person:** Maire Skelly

**Phone:** 604-822-6746

Email: mssk@dentistry.ubc.ca

## **Proposed Calendar Entry:**

Craniofacial Science

Master of Science

**Program Requirements** 

The M.Sc. program requires a minimum of 30 credits, including an 18-credit thesis (DENT 599). A minimum of 12 credits of coursework is required. A minimum of 9 credits must be at the 500-699 level and a maximum of 3 credits can be taken at the 300- or 400-level. Students normally take **DENT 539 and DENT 540 during their** first year. The program will usually require two full academic years; however, an extended program of part-time M.Sc. studies is also available.

Master of Science/Diploma in Clinical **Dental Specialty** 

## URL:

http://www.calendar.ubc.ca/vancouver/inde x.cfm?tree=12,204,828,1145

### **Present Calendar Entry:**

Craniofacial Science

Master of Science

**Program Requirements** 

The M.Sc. program requires a minimum of 30 credits, including an 18-credit thesis (DENT 599). A minimum of 12 credits of coursework is required. A minimum of 9 credits must be at the 500-699 level and a maximum of 3 credits can be taken at the 300- or 400-level. Students normally take DENT 540 during their first year. The program will usually require two full academic years; however, an extended program of part-time M.Sc. studies is also available.

Master of Science/Diploma in Clinical **Dental Specialty** 

# **Type of Action:**

Add DENT 539 to MSc Program Requirements



# **Rationale for Proposed Change:**

DENT 540 was recently reduced in credit from 6 to 3. The statistical component of the course was removed and set up as a 3-credit standalone course, DENT 539. As both courses are required to complete the degree requirements for the MSc in Craniofacial Science, DENT 539 is being added to the program's Calendar entry.



Category: (1)

**Date:** Nov 12, 2013 **Faculty:** Dentistry **Department:** Oral Health Sciences **Contact Person:** Ed Putnins Faculty Approval Date: Sept 12, 2013 **Phone:** 604-822-1734 **Effective Session:** Summer 2014 Email: putnins@dentistry.ubc.ca **URL**:

**Proposed Calendar Entry:** 

**DENT 539 (3) Statistical Methods** 

http://www.calendar.ubc.ca/vancouver/cour ses.cfm?page=name&code=DENT

**Present Calendar Entry:** N/A

**Type of Action:** Create new course

**Rationale for Proposed Change:** 

This course provides an introduction to data analysis and statistical inference. Students learn to describe data (quantitatively and graphically), to select and compute statistical estimates and hypothesis tests, to use computer package (SPSS) to accomplish these tasks, and to interpret and write about the results of the estimates and tests. The overall objective is that students will be able to critically read and evaluate quantitative research articles, and will be able to prepare a quantitative research paper using descriptive and inferential statistics. The course creation was recommended by our accrediting body; the Commission on Dental Accreditation of Canada.

**Proposed Calendar Entry:** 

DENT 540 (3) Research Methods This course is not eligible for Credit/D/Fail grading.

**URL**:

http://www.calendar.ubc.ca/vancouver/cour ses.cfm?page=name&code=DENT

**Present Calendar Entry:** 

DENT 540 (6) Research Methods and Seminars in Oral Biology

This course is not eligible for *Credit/D/Fail grading.* [3-0]

**Type of Action:** Replace current version of course with revised title and content;



decrease credit value; remove vectors.

# **Rationale for Proposed Change:**

To accurately reflect the contact hours and content of the course. The new title adequately reflects the content. There will be a 2-hour lecture per week for one term. The Dentistry Grad Studies committee determined that the content of this course should focus on the primary topic of research methods in Dentistry and a separate stand-alone statistics course for graduate Dentistry students be created as per the recommendation by our accrediting body, the Commission on Dental Accreditation of Canada.

Category: (1)

Faculty: Land and Food Systems Date: June 2013

**Department:** Applied Biology Contact Person: L.M. Lavkulich

Faculty Approval Date: October 30, 2013 **Phone:** 2-3477

Effective Session (W or S): W Email: lml@mail.ubc.ca **Effective Academic Year: 2014** 

**URL:** 

(http://www.calendar.ubc.ca/vancouver/ind

ex.cfm?tree=12,204,828,1234)

**Proposed Calendar Entry: Present Calendar Entry:** 

Soil Science Soil Science

Master of Land and Water Systems

**Program Requirements Program Requirements** 

The M.L.W.S. degree requires 32 credits of coursework consisting of 23 credits of required courses (SOIL 500, SOIL 501, SOIL 503, SOIL 520, FRE 302, FRST 544 and SOIL 548) plus 9 credits of restricted electives depending on which research stream the student has chosen. Of the 32 credits, a maximum of 6 credits may be at the 300 - 400 level, and 26 credits must be at the 500 - level or higher.

> **Type of Action:** Update MLWS Program Requirements; decrease required course credits from 23 to 20 and increase restricted electives from 9 to 12 credits; remove SOIL 500, 503, 520 and FRST 544 as required courses; add SOIL 510, 515 and 550 as required courses.

**Rationale for Proposed Change:** 

The proposal for the Master in Land and Water Systems was initiated in September 2011 and received final Ministry approval in April 2013. There have been several

Master of Land and Water Systems

The M.L.W.S. degree requires 32 credits of coursework consisting of **20** credits of required courses (SOIL 501, SOIL 510, **SOIL 515, SOIL 550,** FRE 302 or equivalent, and SOIL 548) plus 12 credits of restricted electives depending on which research stream the student has chosen. Of the 32 credits, a maximum of 6 credits may be at the 300 - 400 level, and 26 credits must be at the 500 - level or higher.

changes and innovations in the courses and subject matter offered and available at UBC since the initiation of the program proposal.

SOIL 500 is the seminar course for the research based SOIL program (M.Sc. and Ph.D.) and does not meet the academic goals for a professional program. We are thus proposing a professionally focused seminar, **SOIL 510**. In addition, this will ensure that graduate students' transcripts will identify the appropriate seminar within the Soil Science program. There will be occasional meetings of the two groups, notably when guest speakers are invited.

SOIL 503 will be a restricted elective and recommended or after consultation with the Academic coordinator or Director an alternate methods course may be substituted.

SOIL 515 replaces SOIL 520, strengthening the program's focus on integration. The Agricultural Watershed Management course (SOIL 520) remains as an elective.

FRST 544 focuses on communications to professional foresters. Although there is some similarity in concept, the MLWS program deals with a different resource sector and does not emphasize emergent technologies. The introduction of **SOIL 550** will replace FRST 544. SOIL 550 is focused on Professional Communications Strategies within the Land and Water System and incorporates new and emerging electronic information technologies (social media) and is consistent with the goals of the MLWS program to integrate the new technologies.

This is strengthened by the experiences of several MLWS instructors through their

active involvement with the NSERC-CREATE program TerreWEB, which focuses on communications of science.
These instructors have developed innovative communication skills that will enhance and update the teaching of professional communication strategies in the MLWS program.

Category: (1)

**Faculty:** Land and Food Systems **Date:** June 2013

**Department:** Soil Science Contact Person: L.M. Lavkulich

**Faculty Approval Date:** October 30, 2013 | **Phone:** 2-3477

Effective Session: 2014W Email: lml@mail.ubc.ca

URL: N/A

Proposed Calendar Entry: Present Calendar Entry: N/A

**SOIL 510 (2) Land and Water Seminar** Type of Action: Create new course

**Rationale for Proposed Change:** 

The MLWS program focuses on the application and professional communication of research in land and water systems. Thus the academic objective is to expose and train MLWS students in

professional practice.

The seminar series will focus on the role of the professional in contributing to societal concerns and understanding of land and water systems. The SOIL 510 seminar series will be led by the Director and Academic Coordinator of the program who will select the topics, determine the schedule of speakers and events. Invited speakers will include registered professionals from governments and private sectors, as well as from the academic community to discuss real and emergent issues in the land and water systems domain and the variety and success of approaches employed. Students will be required to give two presentations on their professional aspirations and their professional project.

Category: (1)

Faculty: Land and Food Systems

**Department:** Soil Science

Faculty Approval Date: October 30, 2013

**Effective Session:** W14

Date: June 2013

Contact Person: L.M. Lavkulich

**Phone:** 2-3477

Email: lml@mail.ubc.ca

URL: N/A

**Proposed Calendar Entry:** 

**SOIL 550 (3) Professional Communications Strategies** 

**Present Calendar Entry:** N/A

**Type of Action:** Create new course

# **Rationale for Proposed Change:**

The MLWS program focuses on the application and professional communication of research in land and water systems. The objectives of the course are to introduce, explain and provide examples of effective communication strategies, and formats, and to develop analytical skills for MLWS students in professional communications.

The course focuses on the role of the professional in communicating in appropriate formats by determining the issue, the audience and the preferred and most effective form for reaching and engaging the audience, on concerns of land and water systems. The course will be lead by the Academic Coordinator of the program who will be responsible for the orientation and the substantive components of the course plus invited "professional" speakers from governments and private sectors, as well as from the academic community, which will serve as foci for workshops and discussions. Presentations and discussions will concentrate on real and emergent issues in land and water systems and provide assessment criteria and case studies of the approaches employed.

This will provide and highlight examples of strategies for effective communication to a range of audiences such as, government agencies, corporate officials and the public.

Assignments will include preparation of position papers, executive summaries, using conventional and the new and emerging electronic media. The course will complement the required course SOIL 548 (Major Project), as examples for communication exercises will be based on each student's major project.



Office of the Senate Brock Hall | 2016 - 1874 East Mall

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Vancouver BC V6T 1Z1

16 April 2014

To: Vancouver Senate

From: Senate Curriculum Committee

Re: April Curriculum Proposals (approval)

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

The following is recommended to Senate:

**Motion:** "That the new courses, revised courses, and revised programs brought

forward by the faculties of Applied Science, Arts, Education, Graduate and Postdoctoral Studies (Education, Medicine, and Pharmaceutical Sciences), Law, Pharmaceutical Sciences, and Science, and UBC Vantage

College be approved."

Respectfully submitted,

Dr. Peter Marshall, Chair

Senate Curriculum Committee



## **FACULTY OF APPLIED SCIENCE** (Page 3 of 72)

New courses and revised program

EECE 252 (4), 357 (4); MINE 350 (3); BASc First-Year Curriculum

#### **FACULTY OF ARTS** (Page 6 of 72)

New courses, revised course, and new course codes
ANTH 480 (3/6)c; ARBC 101 (3), 102 (3), 201 (3); 202 (3); ARTH 328 (3); ASIA 316 (3), 324
(3), 325 (3), 392 (3), 393 (3), 442 (3), 475 (3); CENS 307 (3); CLST 320 (3), 331 (3), 332 (3);
CNRS 410 (3), 449 (6); CNTO; FHIS; FHIS 333 (3)

### **FACULTY OF EDUCATION** (Page 25 of 72)

New course EDUC 280 (3)

#### FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES (Page 32 of 72)

### **Education** (Page 32 of 72)

Revised programs and new course
Special Education MA and MEd Programs; EPSE 536 (3)

#### **Medicine** (Page 35 of 72)

New course SPPH 550 (3)

#### **Pharmaceutical Sciences** (Page 37 of 72)

Revised Academic Calendar description Graduate Doctor of Pharmacy Program

#### **FACULTY OF LAW** (Page 42 of 72)

New courses

LAW 340 (3), 348 (3), 378 (3), 425 (3)

#### **FACULTY OF PHARMACEUTICAL SCIENCES** (Page 46 of 72)

New course

PHAR 409 (3)

### **FACULTY OF SCIENCE** (Page 48 of 72)

New and revised courses

ATSC 113 (3); BIOL 361 (3), 364 (3); CAPS 200 (3); ENPH 253 (5), 259 (3); ENVR 400 (6); EOSC 240 (3); PHYS 157 (3), 158 (3), 159 (3); 219 (2); 229 (1); STAT 357 (4)

#### **UBC VANTAGE COLLEGE** (Page 63 of 72)

Revised program, new course code, and new courses

UBC Vantage College Program Requirements; VANT; VANT 140 (1-7)d, 148 (2), 149 (1)

ategory: 1	
Faculty: Applied Science	Date: January 2014
<b>Department:</b> Electrical & Computer Engineering	Contact Person: Nick Jaeger
<b>Faculty Approval Date:</b> February 27, 2014	<b>Phone:</b> 2-5673
<b>Effective Session (W or S):</b> S	Email: nickj@ieee.ubc.ca
Effective Academic Year: 2014	
<b>Proposed Calendar Entry:</b>	Type of Action: Create new course.
EECE 252 (4): Linear Circuits  Basic concepts and analysis techniques in the context of electric and electronic circuits.  Treatment of RLC circuits, phasors, op-amps. Introduction to nonlinear circuit elements.  Prerequisite: PHYS 153, MATH 152.  Corequisite: MATH 256 or MATH 255.  [4-0-1]	Rationale for Proposed Change: See Supporting documents. In addition, this course is being created to support changes to the BASc in Engineering Physics program.  X Not available for Cr/D/F grading Rationale for not being available for Cr/D/F: This course is not available for Cr/D/F grading. This a required course in Electrical Engineering and students need to meet specific standards for program-level accreditation and therefore this course cannot be offered for Cr/D/F grading.
Duon and Colondon Entere	□ Pass/Fail or □ Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)
Proposed Calendar Entry:	Type of Action: Create new course.
EECE 357 (4) Stochastic Signals and Systems Stochastic behaviour of signals and systems; discrete and continuous probability; random processes; modeling and identification of linear time-invariant systems; binary hypothesis testing and decision making. [3-0-2] Prerequisite: EECE 269. Equivalency: STAT 357.	Rationale for Proposed Change:  This course is being created in collaboration with the Department of Statistics and will be cross-listed with STAT 357. The purpose of this course is to provide material to ECE students in the context of applications from the domain. This course replaces STAT 251 in the Electrical Engineering Program. It is beneficial for students to see this material within the ECE context.  X Not available for Cr/D/F grading.  Rationale for not being available for Cr/D/F):  This course is proposed to be cross-listed with STAT 357. Either course satisfies an ECE program requirement. As part of the Engineering Accreditation Process this course cannot be taken on Cr/D/F basis.  Pass/Fail or Honours/Pass/Fail
	grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)

Category: 1

Faculty: Applied Science

**Department:** Mining Engineering

Faculty Approval Date: February 27, 2014

Effective Session (W or S): W Effective Academic Year: 2014 **Date:** January 27, 2014

**Contact Person:** W Scott Dunbar

**Phone:** 2-4725

Email: wsd@mining.ubc.ca

## **Proposed Calendar Entry:**

#### MINE 350 (3) Modeling and Simulation

Methods for determining the behaviour of large scale industrial systems and their application to the design and analysis of such systems. [2-2-0]

Prerequisite: STAT 251

## **Type of Action:**

Create new course.

## **Rationale for Proposed Change:**

MINE 395 Mineral Deposit Modeling is being deleted from the curriculum. Over time much of its content began to overlap that of MINE 310 Surface Mine Design. Accordingly MINE 395 changed over the years to include modeling and simulation techniques, the focus of the proposed new course, MINE 350. Also MINE 395 is taught in the same term as MINE 396 and students often confuse the two. Therefore a new course number.

X

Not available for Cr/D/F grading

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

The current policy in the Faculty of Applied Science does not allow for Cr/D/F designation.

 $\square$  Pass/Fail or  $\square$  Honours/Pass/Fail grading

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

#### Category: 1

Faculty: Applied Science

**Department:** n/a

Faculty Approval Date: February 27, 2014

Effective Session (W or S): S Effective Academic Year: 2014 **Date:** Jan. 31, 2014

Contact Person: Carol Jaeger

**Phone:** 2-2592

Email: carolj@apsc.ubc.ca

#### **URL**:

http://www.calendar.ubc.ca/vancouver/index .cfm?tree=12,195,272,33

## **Present Calendar Entry:**

### First-Year Curriculum

First Year	
APSC 122	0
APSC 150 <sup>1</sup>	5
APSC 160	3
CHEM 154 <sup>1</sup>	3
ENGL 112 <sup>2</sup>	3
MATH 100	3
MATH 101	3
MATH 152	3
PHYS 153	6
PHYS 170	3
Complementary Studies electives <sup>3</sup>	3
Total Credits	<del>35</del>

<sup>&</sup>lt;sup>1</sup> Students transferring into Engineering with CHEM 121 and 123 will take APSC 151 in lieu of APSC 150, and will not be required to take CHEM 154.

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

Update calendar entry

# **Rationale for Proposed Change:**

PHYS 153 is a 6 credit full year course. Breaking it into single term courses makes it possible to better align preand co-requisites, and allows us to better assist students who struggle in their first term at UBC.

# **Proposed Calendar Entry:**

### First-Year Curriculum

First-Year Curriculum		
First Year		
APSC 122	0	
APSC 150 <sup>1</sup>	5	
APSC 160	3	
CHEM 154 <sup>1</sup>	3	
ENGL 112 <sup>2</sup>	3	
MATH 100	3	
MATH 101	3	
MATH 152	3	
PHYS 157	<b>3</b>	
PHYS 158	3 3 1	
PHYS 159	1	
PHYS 170	3	
Complementary Studies electives <sup>3</sup>	3	
Total Credits	<mark>36</mark>	

<sup>&</sup>lt;sup>1</sup> Students transferring into Engineering with CHEM 121 and 123 will take APSC 151 in lieu of APSC 150, and will not be required to take CHEM 154.

<sup>&</sup>lt;sup>2</sup> Or another first-year English course.

<sup>&</sup>lt;sup>3</sup> See Complementary Studies Courses.

<sup>&</sup>lt;sup>2</sup> Or another first-year English course.

<sup>&</sup>lt;sup>3</sup> See <u>Complementary Studies Courses</u>.



## UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

Faculty: ARTS
Departments: ANTH

Faculty Approval Date: February 13, 2014

Effective Session (W or S): W Effective Academic Year: 2014

Proposed Calendar Entry:

ANTH 480 (3/6) c Urban Ethnographic Field School (UEFS)

A combination of approximately 50 hours of volunteering and fieldwork based in community organizations with theoretical approaches to urban spaces. Students will engage in collaborative research while considering a range of theoretical and methodological approaches.

Prerequisite: ANTH100. Equivalency

SOC1480.

Date: 9/24/2013

Contact Persons: Alexia Bloch, Thomas

Kemple

Phone: 604-822-4635, 2-3579 Email: abloch@mail.ubc.ca,

kemple@mail.ubc.ca

Type of Action: create new course

#### **Rationale for Proposed Course:**

The course has run as a field school for the past four years (2009-2012) and has used the course numbers Anth409A/Soci495A (Topics in Applied Anthropology and Special Topics, respectively). This new course number will provide greater visibility for the course in the University Calendar. Students will now be able to choose to have 6 credits from either ANTH or SOCI registered on their transcripts, or 3 credits from each discipline.

The course will continue to be field based and focused on Vancouver as a site of study. Students will learn how to use ethnographic methods and how to conduct collaborative research in urban settings with community partners. In class, students will discuss the intersections of space, diverse histories, and political projects, in order to understand communities that comprise urban Vancouver. Class work will include dialogues about theoretical and methodological problems surrounding ethnographic research. Students will engage in approximately 50 hours of ethnographic research through volunteer placements with community organizations. In regularly scheduled workshops we will explore specific techniques of ethnographic inquiry in relation to the students' fieldwork experiences, and in seminar discussions students will examine the theory and method of ethnography in urban settings, as well as theoretical directions especially pertinent to urban research, such as questions of cosmopolitanism, gentrification, freedom and social exclusion, how people inhabit a place, immigration, and diaspora. Classes may also include guest speakers, films, and fieldtrips to Vancouver neighbourhoods and community organizations.



#### **UBC Curriculum Proposal Form** Change to Course or Program

Category: (1)

Faculty: Arts Department: CNERS

Faculty Approval Date: February 13, 2014

Effective Session (W or S): W Effective Academic Year: 2014-15

Proposed Calendar Entry:

ARBC 101 (3) Introduction to the Grammar

and Vocabulary of Classic Arabic

**Proposed Calendar Entry:** 

ARBC 102 (3) Introduction to the grammar and vocabulary of Classic Arabic II

Prerequisite ARBC 101.

**Proposed Calendar Entry:** 

ARBC 201 (3) Classical Arabic (Intermediate)

Increased reading ability as well as learning the further essentials of grammar. Prerequisite ARBC 102.

Date: November 21, 2013

Contact Person: Siobhán McElduff

Phone: 7-4331

Email: siobhan.mcelduff@ubc.ca

Type of Action: create new course

Rationale for Proposed Change: This course replaces the first half of the old ARBC 300, which we propose to divide into 2 3-credit courses. The division of ARBC 300 will allow for more flexibility on the part of students and allow them to explore the language for a term if they wish. The new course code better reflects the introductory nature of the material and brings this, as an introductory course, in line with the codes assigned other language classes at UBC. No other beginning language class in any department has a 300 level course code; having Arabic with this code has created serious inequity both within and outside our department as students were receiving 300 level credit for an introductory language class.

Type of Action: create new course

Rationale for Proposed Change: This course replaces the second half of ARBC 300, which we propose to divide into 2 3-credit courses. The division of ARBC 300 will allow for more flexibility on the part of students and allow them to explore the language for a term if they wish. The new course code better reflects the introductory nature of the material and brings this, as an introductory course, in line with the codes assigned other language classes at UBC. No other beginning language class in any department has a 300 level course code; having Arabic with this code has created serious inequity both within and outside our department as students were receiving 300 level credit for an introductory language class.

Type of Action: create new course

Rationale for Proposed Change: This course replaces the first half of the old ARBC 400, which we propose to divide into 2 3credit courses. The division of ARBC 400 will allow for more flexibility on the part of students and allow them to explore the



language for a term if they wish. The new course code better reflects the introductory nature of the material and brings this, as an introductory course, in line with the codes assigned other language classes at UBC. No other second year language class in any department has a 400 level course code; having second year Arabic with this code has created serious inequity both within and outside our department as students were receiving 400 level credit for the second year language class.

**Proposed Calendar Entry:** 

ARBC 202 (3). Classical Arabic (Intermediate) II

Increased reading ability as well as learning the further essentials of grammar. Continuation of ARBC 201. Prerequisite ARBC 201. Type of Action: create new course

Rationale for Proposed Change: This course replaces the second half of the old ARBC 400, which we propose to divide into 2 3-credit courses. The division of ARBC 400 will allow for more flexibility on the part of students and allow them to explore the language for a term if they wish. The new course code better reflects the intermediate nature of the material and brings this, as an introductory course, in line with the codes assigned other language classes at UBC. No other second year language class in any department has a 400 level course code; having second year Arabic with this code has created serious inequity both within and outside our department as students were receiving 400 level credit for a second year language class.



# UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

Faculty: Arts
Department: AHVA

Faculty Approval Date: February 13, 2014

Effective Session (W or S): W Effective Academic Year: 2014 Date: December 4, 2013

Contact Person: Scott Watson Phone: 604-822-4051

Email: scott.watson@ubc.ca

URL:

http://www.calendar.ubc.ca/vancouver/cour

ses.cfm?page=name&code=ARTH

**Proposed Calendar Entry:** 

ARTH 328 (3) Northern Renaissance Art and

Culture (1400-1550)

Changing roles of visual art and culture within court, religious practice and

everyday life.

Present Calendar Entry: None

Type of Action: Create new course

Rationale for Proposed Change:

This course will ensure the course selections in the Early Modern period offer students improved variety and better reflect the areas

of our teaching faculty.

ARTH 328 Northern Renaissance Art and Culture would enrich the Department of Art History, Visual Art and Theory's course offerings featuring art and architecture in the period 1400-1700, and provide a more balanced perspective - currently only the art and architecture of Italy in this period has previously been offered. ARTH 328 will explore the emergence of modern forms of media (oil painting, print culture) against a backdrop of important historical change (Protestant Reformation, fear of witchcraft,

rise of burgher society). As such, the course would also compliment offerings focused on northern Europe in other Faculty of Arts Departments, particularly Central, Eastern, and Northern European Studies, which offers an introductory survey into northern cultures, centred primarily on literature; a course on witches in northern Europe; and the History Department, which also offers a survey of historical and political

events during this period.

To the best of our knowledge this change will

not affect current students.



#### UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

Faculty: Arts

**Department:** Asian Studies

Faculty Approval Date: February 13, 2014

Effective Session (W or S): S
Effective Academic Year: 2014

**Proposed Calendar Entry:** 

ASIA 316 (3) Race and Ethnicity in Japanese

Literature and Film

Examines relations between majority and minority groups in Japanese society and changing definitions of "Japan" through literature and film from Japan.

Date: November 27, 2013

Contact Person: Stephanie Lee

Phone: 7-2635

Email: Stephanie.Lee@ubc.ca

**Present Calendar Entry:** 

n/a

Type of Action: Create new course

#### Rationale for Proposed Change:

This 300-level course will introduce students to major critical theories of race and ethnicity within the context of East Asia, teaching them to reevaluate preconceptions of "Japan" and "Japanese-ness" by learning about different representations of race/ethnicity, nationhood, empire, and diaspora. The perception of Japanese society as homogeneous and unique has remained a persistent one, and it can often constrict students' interpretations of the Japanese literary and cinematic works they encounter. This course will historicize this idea of homogeneity, showing students how and why it has persisted into the present day. In doing so, it will also explore alternative ways of self-identification, and encourage students to apply what they learn in class to their own experiences living in (or commuting to) the diverse city of Vancouver.

The Department of Asian Studies offers several courses that focus on the history of Asian intercultural exchange and many that explore sex and gender in Asian cultures and literatures, but there is as yet no course that deals explicitly with critical theories of race and ethnicity. Although this course focuses on literature and film from Japan, it is designed to include consideration of Korea and China and can thus complement a number of existing courses in the department. It could also be productively paired with ASIA 254 (Sex, Gender, and Sexuality in Japanese Literature and Film), as gender and ethnicity are always intertwined. The course would also have appeal to students from other programs in the university, including those offered by the Institute for Gender, Race, Sexuality and Social Justice and the Department of Sociology.



In-class discussion will be designed so that students will be continually asked to consider what they know about Japan against *how* they know it. For example, if students find themselves surprised to learn of the Korean population in Japan, they will be encouraged to think about why they feel surprised - and about the different media representations and discourses that have contributed to the perception of Japanese homogeneity, in North America as well as within Japan itself. Assigned readings and lectures will include examples from contemporary newspaper articles, propaganda images, TV clips, and social media such as Twitter and 2chan to stress the link between historical and contemporary issues as well as scholarly and popular materials. Furthermore, certain weeks (such as Week 9: War and Diaspora; see below) will actively focus on the history of immigration to Vancouver and elsewhere in Canada, giving students the opportunity to go out into the community and seek out direct connections to class themes.

The class would be ideally set at 40 students (primarily lower level) to allow for group work and discussion, but can also be feasible with an enrollment of 60.

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

Present Calendar Entry: n/a

Type of Action: Create new course

Rationale for Proposed Change:

UBC currently offers no course dedicated to the literature of Cantonese-speaking areas of greater China. Hong Kong is distinguished for being home to some of the best-selling, as well as most innovative authors writing in Chinese, many of whose works are available in translation. This proposed course is designed to diversify UBC's curriculum in modern Chinese literature and culture by addressing this imbalance. It is one of several designed to lay the groundwork for an upcoming new hire in Cantonese language and cultural studies in the Department of Asian Studies. The course

**Proposed Calendar Entry:** 

ASIA 324 (3) Literature of Hong Kong

A survey of the literature of Hong Kong, from classical times to the present. Important periods in literary history (imperial, colonial, post-colonial), major authors (locals, visitors, and writers elsewhere), and important genres, including poetry, essays, and fiction.



Proposed Calendar Entry:

ASIA 325 (3) Hong Kong Cinema

A survey of the cinema of Hong Kong from the post-war period to the present. The influence of Hong Kong on global cinema, and the forces (artists, studios, audiences, etc.) that have given rise to filmmaking styles and genres perceived as "distinctively Hong Kong."

**Proposed Calendar Entry:** 

ASIA 392 (3) Classical Persian Literature in English Translation

Works of classical Persian literature dating from the tenth to the seventeenth century (in English translation).

will be taught in English.

Present Calendar Entry: n/a

Type of Action: Create new course

Rationale for Proposed Change:

UBC currently offers no course dedicated to the cinema of Hong Kong, a major global center of film production and filmmaking talent. This course will complement a growing complement of courses in Asian cinema, making a future concentration in this field a more likely possibility. This course will also be the first on the books to emphasize the importance of Cantonese-language (as opposed to Mandarin) cinema. This proposed course is one of several designed to lay the groundwork for an upcoming new hire in Cantonese language and cultural studies in the Department of Asian Studies. The course will be taught in English.

Movies will be screened outside of scheduled class times. Information regarding the screening sessions will be provided to students prior to registration. Students also have the opportunity to watch films on their own time.

Present Calendar Entry: n/a

Type of Action: Create new course

Rationale for Proposed Change:

Throughout medieval and early modern periods, Persian was the main language of literary production across a vast region in Asia, including the Middle East, the Caucasus, Central Asia and the Indian subcontinent. The study of classical Persian literature would not only provide for a broader understanding of the cultural diversity of the region, but would also provide a firm intellectual foundation for the current and prospective students of UBC's initiative in Persian Language and Iranian Studies.

This course will be a key component building on and complementing our new suite of courses in Persian language (PERS 100, 101, 104, 200, 201, 300) and will also be central to our move to incorporate Persian literary culture into our broader offerings about the history and literary culture of South Asia.

UBC will be the first university in western Canada and one of less than 20 universities in



	all of North America offering courses in Persian language and literature.
	Enrollment expectation: 40~60 students
	Not available for Cr/D/F grading
Proposed Calendar Entry:	Present Calendar Entry: n/a
ASIA 393 (3) History of Iran from the Sasanians to the Safavids	Type of Action: Create new course  Rationale for Proposed Change:
Iranian history from the fall of the Sasanian empire and the Arab conquest of Iran to the rise of Iranian dynasties in the east, the reign of Turkic and Turko-Mongolian rulers, and the formation of a Shi'ite Iran under the Safavids.	This course provides the historical, cultural, religious, and social contexts of the literary texts studied in the proposed sister course on Classical Persian Literature in English Translation. Moreover, considering the important role that Iran has played in the history of the Middle East, Western, Central and South Asia, study of Iranian history is of utmost importance for students of a wide range of disciplines, from Near and Middle Eastern Studies to Central and South Asian Studies, and from Islamic Studies to Political Science and Cultural Studies. The course would also be of great interest to students of Persianate heritage enrolled in a variety of programs across UBC.
	This course will be a key component building on and complementing our new suite of courses in Persian language (PERS 100, 101, 104, 200, 201, 300) and will also be central to our move to incorporate Persian literary culture into our broader offerings about the history and literary culture of South Asia. UBC will be the first university in western Canada and one of less than 20 universities in all of North America offering courses in Persian language and literature and Iranian history.  Enrollment Expected: 40~60 students
Proposed Calendar Entry:	Not available for Cr/D/F grading  Present Calendar Entry: n/a
ASIA 442 (3) Lives of Chinese Books	Type of Action: Create new course
Concepts and methods for understanding the lives of books across time, through an examination of both the material forms of a text and its cultural reception. Focus on one major work from pre-modern China.	Rationale for Proposed Change:  Students will be introduced to the challenges of reading a single text from multiple perspectives, of reconstructing the processes through which texts and canons are made and unmade, and of making use of indirect sources such as bibliographies and commentaries.



In their research for this research-intensive ("R") course, students will build on these methods either by examining in greater depth one facet of the text or by looking at a related text in a similar fashion.

This course will be an important addition to the Department's roster of research-intensive courses. These are currently limited in number, especially in the area of pre-modern Chinese studies, in which many Asian Studies majors have an interest. It will also expose undergraduates to a set of methodologies and research questions that have become prominent in the field, as reflected in the number of publications about book history, the material culture of the text and related themes in recent years. The class will therefore be an opportunity to introduce current research and to work with a range of primary materials.

The course will invite students to creatively extend the skills and concepts learned in relation to the core content to other areas, by leaving the research topic relatively open (to include, for example, histories of other texts, including comparisons with texts from other world regions). It will also provide the option of presenting research findings in forms other than that of a traditional research essay, such as interactive media, an audio-visual format, etc., so long as it is based on research and documentation of the use of sources is provided either internally as part of the final project or externally as an accompanying document.

As a research-intensive class, this course furthers the objective of promoting research for undergraduates. And the conference at the end of term, which will involve students presenting their work in progress and providing peer feedback on their classmates', exposes them to the norms and practices of a scholarly research community.

Based on current enrolment in similar classes, the department would expect this research-intensive class to attract a cohort of about 20 students. The majority are likely to be majors in Asian Studies, and because of the broad applicability of the methodologies involved, it may also appeal to students in related fields such as History and other area studies



	programmes.
	Not available for Cr/D/F grading
Proposed Calendar Entry:	Present Calendar Entry: n/a
ASIA 475 (3) Documenting Punjabi Canada	Type of Action: Create new course
Exploration of the history of the Punjabi Canadian community through traditional text-based methods and oral history collection (in English or Punjabi).  Prerequisite: ASIA 376.	Rationale for Proposed Change: We have a limited number of 400-level seminars in the Department with a South Asia focus, and few opportunities to do advanced work on the Punjabi Canadian community. This class allows for an exploration of local history through traditional text-based approaches as well as Community Based Learning.
	This course is designed as an upper-level English-language seminar that integrates methods utilized in PUNJ 300 and in a related course, currently being proposed, at the 400-level in PUNJ, but allows for student work in the arena of oral and local history in an English-language environment. (Students can take any and all of these classes; there will be little overlap.) In this way it provides for a fuller engagement with oral history across the curriculum in the Department, for a range of students (Punjabi speakers and non). This class augments our current curriculum by providing a focused historical grounding in the history of the Punjabi-Canadian community (unlike the broad courses on the South Asian diaspora we currently offer), an introduction to aspects of its cultural production, and the opportunity to explore oral history methods in the English language with this community. In this way it augments the Punjabi-language orientation of its sister course. The class will also have a potentially powerful place in the evolving Asian Canadian Studies initiative at UBC.
	This class extends a Community Based Learning initiative begun in 2009-2010 in PUNJ 300 towards a fuller engagement with oral history collection. It encourages the use of multimedia to produce final projects related to course content.
	This class features the research and community based learning components of the E3 initiative, as well as group learning and multimedia projects.

UBC	THE UNIVERSITY OF BRITISH COLUMBIA
	Up to 20 students expected.  Not available for Cr/D/F grading
	(undergraduate courses only)



# UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

Faculty: Arts Date: 28 November 2013

Department: CENES Contact Person: G. Winthrop-Young Phone: 2-6403

Effective Session (W or S): W\_1 Email: Winthrop@mail.ubc.ca Effective Academic Year: 2014

Proposed Calendar Entry: Present Calendar Entry: None

CENS 307 (3) Witches: Myth and Reality Type of Action: Create new course

Examination of the cultural, social, and historical construction of the witch in central and northern Europe with comparisons to recent history, current events, and popular culture.

Rationale for Proposed Change:
We currently have few courses at the undergraduate level that, first, address the medieval and early modern periods and, second, take explicitly as a primary object of study the use of identity categories in the

creation of social outsiders. The course addresses these gaps and responds to student

feedback as well as instructor interest

Available for Cr/D/F grading



#### UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

Faculty: Arts
Department: CNERS

Faculty Approval Date: February 13, 2014

Effective Session (W or S): W Effective Academic Year: 2014

Proposed Calendar Entry:

CLST 320 (3) Slavery in the Ancient Greek and Roman World.

The study and history of slavery in the Greek and Roman worlds as a political, legal, economic, social, and cultural phenomenon. Prerequisites: one of CLST 231, 232, or 260.

**Proposed Calendar Entry:** 

CLST 331 (3) Greek Art and Architecture

An introduction to the visual culture of the ancient Greek world in the second and first millennia BCE, especially from c. 1000 to 30 BCF.

Date: August 30, 2013

Contact Person: Siobhan McElduff

Phone: 7-4331

Email: siobhan.mcelduff@ubc.ca

Present Calendar Entry: none

Type of Action: Create New Course

Rationale for Proposed Change: Slavery was a key component in ancient societies and a critical part of their economic and social structures. This course will allow us to cover this important material and to compare ancient forms and systems of slavery with modern slavery. It also contributes to UBC's global mission by its interest in social justice and in recovering lost or underwritten histories.

Present Calendar Entry: None: the course replaces the first half of CLST 330(6).

Type of Action: Create new course

Rationale for Proposed Change: This course covers the material taught in the first semester of CLST 330; the later material will be taught in CLST 332, also a new course. This will allow students more flexibility and choice, as they will now have the option to study either Greek art and architecture, or Roman art and architecture, or both, as their interests and academic needs dictate. Due to significant alteration in the structure of the course, this is being proposed as a Category 1 change. Due to new regulations from the Dean of Arts' Office, which no longer gives the 'home' department credit for students taking the course under another course code, we will regretfully no longer be able to continue cross-listing this course with Art History. CLST 330 will be deleted (a form will be submitted when this has been passed to the Arts Senate, to ensure we do not end up in a situation where a course has been deleted and there is no replacement in place).

**Proposed Calendar Entry:** 

CLST 332 (3) Roman Art and Architecture

An introduction to the visual culture of the ancient Roman world from the 8<sup>th</sup> century

Present Calendar Entry:

None: the course replaces the second half of

CLST 330 (6)

Type of Action: Create new course

E to the 4th century CE.

Rationale for Proposed Change: This course covers material taught in the second semester of CLST 330; the earlier material will be taught in CLST 331, also a new course. It will allow students more flexibility and choice because they now will have the option to study either Greek art and architecture, or Roman art and architecture, or both, as their interests and academic needs dictate. Due to significant alteration in the structure of the course, this is being proposed as a Category 1 change. Due to new regulations from the Dean of Arts' Office, which no longer gives the 'home' department credit for students taking the course under another course code, we will regretfully no longer be able to continue cross-listing this course with Art History. CLST 330 will be deleted (a form will be submitted when this has been passed to the Arts Senate, to ensure we do not end up in a situation where a course has been deleted and there is no replacement in place).



#### **UBC Curriculum Proposal Form** Change to Course or Program

Category: (1)

Faculty: Arts

**Department: CNERS** 

Faculty Approval Date: February 13, 2014

Effective Session (W or S): Winter Effective Academic Year: 2014-15

Proposed Calendar Entry:

CNRS 410 (3) The Archaeology of Ancient

Cyprus

An overview of the archaeology of ancient Cyprus from the island's initial colonization in the 10<sup>th</sup> millennium BCE through the period of its rule as part of the Roman Empire (4<sup>th</sup> century CE).

Prerequisite: One of NEST 101, NEST 319, CLST 204.

Date:

Contact Person: Kevin Fisher

Phone: 604 822-9139

Email: kevin.fisher@ubc.ca

Present Calendar Entry: None

Type of Action: Create New Course

#### Rationale for Proposed Change:

This is a new course that leverages new expertise available within Classical, Near Eastern, and Religious Studies. The island of Cyprus has long been recognized as a nexus for the transmission of cultural innovations between the Graeco-Roman and Near Eastern worlds and serves as a compelling case study for a number of important themes in archaeological practice and research. The course will be of interest to students majoring in Near Eastern Studies and the Archaeology of Greece, Rome and the Near East in the Dept. of Classical, Near Eastern and Religious Studies. It will also be of interest to students taking archaeology in the Dept. of Anthropology, and those majoring in art and archaeology in the Dept. of Art History, Visual Art and Theory.

The course is offered at 3 credits in line with most offerings within the department. It will be capped at 30 students. The course will be offered every other year.



# UBC Curriculum Proposal Form Change to Course or Program

Category: (1)
Faculty: Arts

Faculty: Arts	Date: December 12, 2013
Department: CNERS	Contact Person: Lyn Rae
Faculty Approval Date: February 13, 2014	Phone: 2 - 4066
Effective Session (W ):	Email: lyn.rae@ubc.ca
Effective Academic Year: 2014	
Proposed Calendar Entry:	URL:
	http://www.calendar.ubc.ca/vancouver/cour
CNRS 449 (6) Honours Essay	ses.cfm?page=name&code=RELG
This course is not eligible for Credit/D/Fail	
grading.	Present Calendar Entry: CLST 449 (6) Honours Essay This course is not eligible for Credit/D/Fail grading.
	Type of Action: change course code
	Rationale for Proposed Change: As part of a package of reforms CNERS is simplifying its major and minor programs. This new, single, major in CNERS will be less confusing, easier for students to navigate and simplify our degree structure considerably. It will also allow students to apply credits taken in a wide variety of course codes within our department towards their major. Hence we are deleting our old majors [6 in total] and this is part of that process.
	Rationale for course: please see below
	Not available for Cr/D/F grading (undergraduate courses only)
	Rationale for not being available for Cr/D/F: course is for honours students only.
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)



#### UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

Faculty: Arts
Department: ASIA

Faculty Approval Date: February 13, 2014

Effective Session (W or S): S Effective Academic Year: 2014 Date: November 27, 2013

Contact Person: Stephanie Lee

Phone: 7-2635

Email: Stephanie.Lee@ubc.ca

Proposed Calendar Entry:

Present Calendar Entry: n/a

**CNTO - Cantonese** 

Type of Action: Create new course code

Asian Studies, Faculty of Arts

Rationale for Proposed Change:

The Department of Asian Studies seeks to launch a new package of courses in Cantonese language at UBC. The four-letter acronym that is the most logical and self-identifying

short form of Cantonese is CNTO.

Cantonese is a separate, independent language, mutually unintelligible with Mandarin, and with its own strong identity and history. At least 1500 years have elapsed since the common ancestor of Mandarin and Cantonese split. Lumping together as 'Chinese' mutually unintelligible Sinitic topolects that are treated by linguists as separate languages and perceived by their own speakers as distinct from Mandarin is unacceptable, and promotes the myth of a monolithic China and Chinese language. The analogy would be to suggest listing all of French, Spanish, Italian and Portuguese at UBC under a single course code like ROMN.



# UBC Curriculum Proposal Form Change to Course or Program

Category: 1

Category: 1	
Faculty: Arts	Date: December 5, 2013
Department: FHIS	Contact Person: Prof. R. Sarkonak
Faculty Approval Date: February 13, 2014	Phone: 2-4005
Effective: 2014W, Term 1	Email: ralph.sarkonak@ubc.ca
Proposed Calendar Entry:	Present Calendar Entry: None
FHIS - French, Hispanic and Italian Studies	Type of Action: Create a new course code
	RATIONALE
	The Department of French, Hispanic and Italian Studies has course codes assigned to courses in the four languages and literatures that it teaches - FREN, ITAL, ITST, PORT, SPAN - and to courses related to its interdisciplinary programme in Romance Studies - RMST.
	It has not, however, had a separate code for courses in the culture and literature of romance-speaking countries, to be offered for elective credit as part of the general education of interested students.
	It has, somewhat confusingly, offered such courses under the code RMST, shared not only by the honours programme in Romance Studies, but also by at least one upper-level course countable toward that programme and by two lower-level courses required for it.  Since it is our hope to offer more
	transcultural courses dedicated to the general education of interested students, we now propose to identify them more clearly by a code separate from that of the Romance Studies programme, namely FHIS, chosen on the analogy of the existing codes CENS and CNRS, used by departments with which we have much in common.
Faculty: Arts Department: FHIS	Date: December 5, 2013 Contact Person: Prof. R. Sarkonak
Faculty Approval Date: February 13, 2014	Phone: 2-4005
Effective Session <u>W</u> Term <u>1</u> Year <u>14</u> for Change	E-Mail: ralph.sarkonak@ubc.ca Proponent: D. Boccassini
Proposed Calendar Entry:	Present Calendar Entry: None
Troposed Galeridai Litti y.	Tresent Galendar Litti y. None
FHIS 333 (3) Short Fiction in Romance Literatures	Type of Action: Create new course
A study of the genres of the "novella" and the short story within and across Romance cultures.	Rationale: This course explores some enduring international achievements of the literatures of Romance (French, Hispanic and Italian) languages, giving a good survey of issues and epistemic ages from the Middle Ages to our
	populationile ages from the initiale Ages to our

<b>UBC</b>	
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(1)	
	day.
	It is meant to serve students in the general public (i.e. who are not FHIS Majors or Minors), but who might wish, with this course, to satisfy the Literature requirement or simply to explore an interesting literary genre.



# **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)	
Faculty: Education Department: Teacher Education Office Faculty Approval Date: March 12, 2014 Effective Session: Winter, Term 1 Year 2014 for Change	Date: January 15, 2014 Contact Person: Wendy Carr Phone: 604-827-5088 Email: wendy.carr@ubc.ca
<b>Proposed Calendar Entry:</b>	URL:
EDUC 280 (3) English and Reading: Secondary  For Dadaab, Kenya teacher education	Present Calendar Entry:
students.	Type of Action: New course
	Rationale for Proposed Change: This will be a new course in a diploma program to be offered to teacher candidates in Dadaab who wish to develop their professional skills and competencies. UBC courses will be transferred to Moi University of Kenya, who will confer a Diploma in Teacher Education to successful candidates.
	Teacher candidates will practise reflective inquiry into the particulars of their daily teaching strategies, curricula, classroom organization and assessment, the needs and challenges of the learners, and the larger social/cultural dimensions of teaching connected to their particular school and community environments.
	Not available for Cr/D/F grading. (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)
	☐ Pass/Fail or ☐ Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)

## **EDUC 280: ENGLISH AND READING: SECONDARY**

### **COURSE DESCRIPTION**

This course provides a general overview of teaching reading and literature to secondary students. The goal is to strengthen the Dadaab teachers' abilities and confidence to teach and assess reading ability and literary understanding and to situate that learning in a larger sociocultural context. It begins by addressing the needs of a variety of learners, including struggling or "striving" readers, and the demands of academic reading across the secondary curriculum. The course then focuses on teaching literature, including engaging readers in the interpretive process, drawing on a range of critical perspectives to deepen responses. Teaching particular literary genres is addressed in the next section of the course, followed by a focus on popular culture and new media in relation to literature. The course closes with a focus on organizing for literature instruction and on a range of assessment practices to support and evaluating student learning. This course proceeds from the assumption that teachers are expected to be able to create lively and engaging learning activities for a range of students and to support their understanding and interpretation of a range of academic texts with a focus on literature and literary texts.

#### **COURSE OBJECTIVES**

During this course student teachers will review, consider, discuss and be able to:

- Use strategies for supporting struggling or "striving" readers
- Support students' abilities to read across the curriculum
- Engage students in responding to literature
- Encourage multimodal responses to literature
- Support students as they drawing on a range of literary critical perspectives to interpret literature
- Engage students in a reading a variety of literary genres: poetry; short stories; and classic, contemporary and young adult novels (African, East African, and world literature)
- Use popular culture and media to teach literature
- Engage students in writing about literature
- Organize their classrooms and students for literature instruction
- Assessing reading and literary understanding, Part I
- Assessing reading and literary understanding, Part II

# **Course Schedule**

Class 1	Struggling and "Striving" Adolescent Readers	
Topic	Strategies for Supporting Readers in the Classroom	
Guiding	How do we identify struggling/striving readers?	
Questions	How can we support struggling/striving readers?	
	What reading strategies support these readers?	
Suggested	Become familiar with key vocabulary and reading comprehension strategies and	
Activities	ways to teach students to use strategies (Fielding and Pearson, 1994; Hennings,	
	2000; Moore, 1999); examine various ways to assess readers' comprehension and	
	word analysis skills; become familiar with any national or regional reports of	
	adolescent reading practices and abilities (see also Alvermann, 2002)	
Class 2	Reading Across the Curriculum/Disciplines	
Topic	Reading Texts in Academic Disciplines	
Guiding	What are the specific demands of reading in various disciplines? (Moje, 2008;	
Questions	Shanahan and Shanahan, 2008)	
	How can we support readers to read for understanding across the curriculum?	
Suggested	Bring in sample chapters from textbooks used in the secondary curriculum across	
Activities	the curricular subject area and analyze them for disciplinary discourses	
Class 3	Responding to Literature	
Topic	Approaches to Supporting Student Literary Responses, Focus on Discussion	
Guiding	How can students learn general response strategies?	
Questions	How can student responses become the basis for literary discussion?	
	How can I utilize literature groups? See Annenberg site: "Responding as readers,	
	Conversations in Learning:	
	http://www.learner.org/workshops/conversations/conversation/responding/	
Suggested	Use basic response strategies to interpret a poem (connecting the text to self, social	
Activities	and cultural worlds, and other texts)	
	Work in small groups to develop interpretations to a work of literature	
Class 4	Multimodal Approaches to Literary Response	
Topic	Using Art, Drama, Film, Photography to Respond to Literature	
Guiding	How can we fully engage students in literature through visual and multimodal	
Questions	response strategies?	
	How can multimodal strategies support students' interpretations of literature?	
Suggested	Respond to a piece of literature using one or more of the following strategies:	
Activities	tableau/drama, readers theatre or "hotseating" activity (Wilhelm at	
	http://teachingliterature.pbworks.com/w/page/19920226/Chapter%2010%3A%20r	
	elated%20files); art, photography, and/or video	
Class 5	Teaching a Variety of Literary Genres	
Topic	Engaging Students in Reading a Variety of Literary Genres: Poetry; Short	
	Stories; Classic, Contemporary and Young Adult Novels; Creative Non-	
	Fiction – focus on African, East African and world literature selections	
Guiding	How can we help students acquire genre awareness? How can students become	

Questions	familiar with genre conventions? How can students become aware of the purposes	
	associated with genre conventions?	
Suggested	Study the various conventions associated with fairy tales, with the news genres,	
Activities	with collected family narratives, etc. Identify what purposes are associated with	
	various genres. How do genres vary across cultural contexts?	
Class 6	Using Literary Critical Perspectives	
Topic	Learning to Interpret Literature using Literary Critical Perspectives	
Guiding	What are the different critical perspectives from which we can analyze works of	
Questions	literature? (Beach, R. Teaching resources for Teaching literature to adolescents,	
	Routledge, 2011)	
	http://teachingliterature.pbworks.com/w/page/19920287/Chapter%209%3A%20M	
	ultiple%20Perspectives%20to%20Engage%20Students%20in%20Literature	
Suggested	Apply one or more critical perspectives to a work of literature; begin with a simple	
Activities	folk or fairy tale or poem, and then apply to a longer work of literature.	
Class 7	Popular culture, Media and Literature	
Topic	How Do Students Use Popular Culture to Connect to and Critically Engage	
C : I	with Literature?	
Guiding	How can we incorporate the use of popular music, film, TV into literature teaching	
Questions	to both engage students and foster critical literacy perspectives? (Morrell, 2003)	
Suggested	Bring in a sample of contemporary music and analyse it as culturally and	
Activities	historically situated; apply the same analysis to a canonical poem; compare	
	characters from a classic work of literature to the characters or similar events (a	
1	trial a tight afor around lavaral in a contamporary tilm	
Class &	trial, a fight, star crossed lovers) in a contemporary film.	
Class 8	Writing about Literature	
Topic	Writing about Literature Writing about Literature from Initial Responses to Literary Essays	
Topic Guiding	Writing about Literature Writing about Literature from Initial Responses to Literary Essays How can we support informal writing about literature (journaling, free writing,	
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Topic Guiding Questions	Writing about Literature from Initial Responses to Literary Essays  How can we support informal writing about literature (journaling, free writing, creative responses, blogs, multi-genre projects, etc.; Annenberg site: Engaging Writers, Developing writers unit:  http://www.learner.org/resources/series194.html), Mack (2002) and Beach et al (2011) website:  http://teachingliterature.pbworks.com/w/page/22909178/Informal%20writing%20tools%20%28chapter%2012%29  How can we support formal writing about literature – using interpretive strategies, providing evidence, writing essays with structure  http://www.ascd.org/publications/books/105142/chapters/Reading-and-Writing-in-English-Classes.aspx	
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Topic Guiding Questions  Suggested Activities Class 9	Writing about Literature from Initial Responses to Literary Essays  How can we support informal writing about literature (journaling, free writing, creative responses, blogs, multi-genre projects, etc.; Annenberg site: Engaging Writers, Developing writers unit:  http://www.learner.org/resources/series194.html), Mack (2002) and Beach et al (2011) website:  http://teachingliterature.pbworks.com/w/page/22909178/Informal%20writing%20tools%20%28chapter%2012%29  How can we support formal writing about literature – using interpretive strategies, providing evidence, writing essays with structure  http://www.ascd.org/publications/books/105142/chapters/Reading-and-Writing-in-English-Classes.aspx  Collect samples of student writing and reflect on the interpretive strategies used, use of evidence, ability to organize an essay  Organizing the Classroom for Reading and Literature Teaching	
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Activities	unit/lesson plans and discuss those plans with peers; teach a selected lesson from your unit, which draws on one or more literary genres and approaches, to the class and gather feedback.	
Class 10	Assessment of Reading and Literary Understanding, Part I	
Topic	Informal and formative assessment practices	
Guiding	How can we assess literary understanding through informal response processes	
Questions	and artifacts?	
	How are new literacies practices (multimodal, media integrated practices)	
	challenging assessment (Burke and Hammett, 2010; Tierney & Rogers, 2004)?	
	What is holistic assessment in the context of rapidly changing literacy practices	
	(Tierney, 2007)?	
Suggested	Create a list of criteria for evaluating informal responses to literature; Create a	
Activities	rubric for assessing student work.	
CI 11	Prepare guidelines for students' collections (portfolios) of responses to literature	
Class 11	Assessment of Reading and Literary Understanding, Part II	
Topic	Formal and summative assessment practices	
Guiding	What are the best methods for providing feedback to students? Brookhart (2008)	
Questions	(http://www.ascd.org/publications/books/108019/chapters/Types-of-Feedback-	
	and-Their-Purposes.aspx How can we construct effective formative assessments? Open-ended vs. closed	
	questions on quizzes and tests; preparing students for standardized assessments;	
	criteria for assessment:	
	http://www.teachingliterature.org/teachingliterature/chapter12/activities.htm	
Suggested	Construct a test for your unit developed above. Examine your objectives and tools	
Activities	for formative assessment and devise test items and evaluative criteria that are	
	consistent with unit objectives and goals and that provide an opportunity for	
	students to display their learning of various objectives.	
Class 12	Review	
& 13		
Topic	Review of key issues related to teaching reading and literature in the	
G	secondary school	
Guiding	N/A	
Questions		
Suggested	Independent review and practice examination.	
	independent terrew and practice examination.	
Activities		

# **EVALUATION**

**Attendance and participation policy:** We encourage student teachers to attend regularly and participate in all large and small group activities.

# Successful completion of the course will include a high standard of performance in the following activities:

Assignment 1. Teach a poem to a small group, inviting responses and leading a discussion and reflection 10%

This assignment is to help students become aware of ways to lead a discussion of literature that is based on peer readers' responses and moves toward interpretation. The reflection will encourage student teachers to listen to responses and lead a discussion of a literary work, and to reflect on this process.

Assignment 2. Group lesson presentation of a short story 10%

Groups of 2-4 student teachers will present a short story and engage peers in several activities that are multimodal and lead toward critical interpretation of the literary work. This assignment will help student teachers learn how to develop a lesson that moves from a work, through response to interpretation.

Assignment 3. Using popular culture to teach African literature 10%

In groups of 2-4, plan a lesson around a local or regional work of literature and, using popular culture, develop a lesson plan with an overall purpose, a set of objectives, multimodal response and interpretive activities and approaches to assessment.

Final Written Examination 70%

#### **READINGS AND RESOURCES**

Alvermann, D. (2002) Effective literacy for adolescents. *Journal of Literacy Research*, *34*, (2), pages 189-208. Version available at:

http://www.literacyresearchassociation.org/publications/alverwhite2.pdf

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Burke, A., & Hammett, R. F. (2010). Assessing new literacies: Perspectives from the classroom. New York: Peter Lang.

Brookhart, S. M. (2008). *How to Give Effective Feedback to Your Students*. Alexandria, VA: Association for Supervision & Curriculum Development

Conversations in Literature; Responding as readers, Annenberg site http://www.learner.org/workshops/conversations/conversation/responding/

Courtland, M.C. & Gambell, T (Eds.). (2010). *Literature, media, & multiliteracies in adolescent language arts*. Vancouver: Pacific Educational Press

Fielding, L.G. and Pearson, P.D. (1994) Synthesis of Research/Reading comprehension: What works. *Educational Leadership*, *51*, (5), pages 62-68

- $\underline{http://www.ascd.org/publications/educational-leadership/feb94/vol51/num05/Synthesis-of-Research-\sim-Reading-Comprehension@-What-Works.aspx$
- Ivey, G. and Fisher, D. (2006) *Creating literacy rich schools for adolescents*, chapter on writing available at: <a href="http://www.ascd.org/publications/books/105142/chapters/Reading-and-Writing-in-English-Classes.aspx">http://www.ascd.org/publications/books/105142/chapters/Reading-and-Writing-in-English-Classes.aspx</a>
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- Mack, N. (2002). The ins, outs, and in-betweens of multigenre writing. *English Journal*, (92)2, Mulitgenre teaching, 91-98.
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- Morrell, E. (2002) Toward a critical pedagogy of popular culture: Literacy development among urban youth. *Journal of Adolescent and Adult Literacy*, 46 (1), 72-77 http://culturemediaed.pressible.org/files/2011/09/morrellpopculture.pdf
- Pearson, P.D. and Johnson, D. D. (1978/2013). *Teaching reading comprehension*. Available at http://textproject.org/textshelf#books
- Shanahan, T. & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content area literacy. *Harvard Educational Review* (78)1, 40-60.
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- Tierney, R. J. & Rogers, T. (2004). Process/content/design/critique: Generative and dynamic evaluation in a digital world. *The Reading Teacher* 58, 218-221.



Category: 1

Date: September 24, 2010 Faculty: Education **Department:** ECPS Contact Person: Cay Holbrook Faculty Approval Date: May 11, 2011 **Phone:** 604-822-2235

**Effective Session:** S14

Email: cay.holbrook@ubc.ca URL:

**Present Calendar Entry: Proposed Calendar Entry:** 

Special Education **Special Education** 

Master of Arts Master of Arts

**Program Requirements Program Requirements** 

Students completing a Master of Arts degree in Special Education can choose courses in the following concentrations:

Supporting Inclusive Education

- Autism/Developmental Disabilities
- Behaviour Disorders
- Blindness and Visual Impairment
- Education of the Deaf and Hard of Hearing
- High Ability
- Learning Disabilities

M.A. concentrations require the completion of a minimum of 30 credits, including coursework (24 credits) and thesis (6 credits). The Blindness and Visual Impairment Concentration requires 45 credits (39 credits coursework, 6-credit thesis), and the Education for Deaf and Hard of Hearing Concentration, 56 credits (50

Students completing a Master of Arts degree in Special Education can choose courses in the following concentrations:

http://www.calendar.ubc.ca/vancouver/index.

cfm?tree=12,204,828,1235

- General Special Education
- Autism/Developmental Disabilities
- Behaviour Disorders
- Blindness and Visual Impairment
- Education of the Deaf and Hard of Hearing
- **High Ability**
- Learning Disabilities

M.A. concentrations require the completion of a minimum of 30 credits, including coursework (24 credits) and thesis (6 credits). The Blindness and Visual Impairment Concentration requires 54 credits (48 credits coursework, 6-credit thesis), and the Education for Deaf and Hard of Hearing Concentration, 56 credits (50 credits



credits coursework, 6-credit thesis).

For B.C. teachers: Teacher Qualification Service requires a capstone experience (e.g., thesis).

Master of Education

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**Program Requirements** 

Students completing a Master of Education degree in Special Education can choose courses in the following concentrations:

#### Supporting Inclusive Education

- Autism/Developmental Disabilities
- Behaviour Disorders
- Blindness and Visual Impairment
- Education of the Deaf and Hard of Hearing
- High Ability
- Learning Disabilities

Concentrations require the completion of a minimum of 30 credits. The Blindness and Visual Impairment Concentration requires 39 credits and the Education for Deaf and Hard of Hearing Concentration, 47 credits. Credits include the graduating seminar at the end of the student's program in which a professional portfolio is completed.

For B.C. teachers: Teacher Qualification Service requires a capstone experience (e.g., EPSE 590 Graduating Seminar).

Contact Information

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coursework, 6-credit thesis).

For B.C. teachers: Teacher Qualification Service requires a capstone experience (e.g., thesis).

Master of Education

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**Program Requirements** 

Students completing a Master of Education degree in Special Education can choose courses in the following concentrations:

- General Special Education
- Autism/Developmental Disabilities
- Behaviour Disorders
- Blindness and Visual Impairment
- Education of the Deaf and Hard of Hearing
- High Ability
- Learning Disabilities

Concentrations require the completion of a minimum of 30 credits. The Blindness and Visual Impairment Concentration requires 45 credits and the Education for Deaf and Hard of Hearing Concentration, 47 credits. Credits include the graduating seminar at the end of the student's program in which a professional portfolio is completed.

For B.C. teachers: Teacher Qualification Service requires a capstone experience (e.g., EPSE 590 Graduating Seminar).

Contact Information

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

Update concentration name for both the MA and MEd from General Special Education to Supporting Inclusive Education. Update



credit requirements for the Blindness and Visual Impairment Concentration for both the MA and MEd in Special Education.

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

The concentration name has been updated because concentrations are suggested course groupings to guide students in specializing within the Special Education Program. The suggested courses are now more structured and geared toward the idea of supporting inclusive education, making this a better name than General Special Education for the new concentration requirements.

For both the MA and MEd concentration in Blindness and Visual Impairment, elimination of redundancy and consolidation of topics within courses were made to align with current practice in the field and has resulted in the reduction of credits from the concentration requirements.

#### **URL**:

http://www.calendar.ubc.ca/vancouver/course
s.cfm?code=EPSE

#### **Present Calendar Entry:**

N/A

# **Type of Action:**

Create new course

## **Rationale for Proposed Change:**

This course is needed to provide graduate-level, in-depth understanding about the characteristics and needs of students with visual impairments including those with additional disabilities. Students will continue to apply and expand upon the foundational content from this course in future courses within the concentration, making it an essential course to the cohesiveness of the concentration and the theoretical and practical understanding that students have about the field.

## **Proposed Calendar Entry:**

EPSE 536 (3) Foundations of Education for Students with Visual Impairments

Online course.



Category: 1

Faculty: Medicine
Department: SPPH

Faculty Approval Date: January 7, 2014

Effective Session (W or S): W Effective Academic Year: 2014 Date: September 6, 2013

**Contact Person:** Eugenia Oviedo-Joekes

**Phone:** 604 505 3607

Email: eugenia@cheos.ubc.ca

**URL**:

http://www.calendar.ubc.ca/vancouver/cour

ses.cfm?code=SPPH

Proposed Calendar Entry: Present Calendar Entry: N/A

SPPH 550 (3): Public Health Approaches to Substance Use and Addictions

Critical examination of strategies regarding addictive behaviours, substance use and related problems, in the context of a multidisciplinary approach.

Type of Action: Create new course

**Rationale for Proposed Change:** 

Substance use and addictions continue to be a major public health challenge in Canada and worldwide. SPPH550 offers a unique opportunity for students to critically examine public health approaches to addictive behaviours, substance use, and related problems in a multidisciplinary context.

The course considers individual and social environmental factors that contribute to the development, prevention, treatment, and management of addictive behaviours and their related problems. Such an approach is essential to the development of student comprehension of the complexity of public health policies in substance use and addictions.

A few other courses at UBC include some of the topics included in SPPH550, but none of them offer the scope and multidisciplinary approach of SPPH550. For example, the School of Population and Public Health offers one course on addictions and mental health, however from a psychiatric perspective on severe addictions and diagnosis of mental health disorders.



SPPH550 has been offered as a special topic (under SPPH 581B) for two years. The course has received very good student evaluations indicating it is well received. For example, students indicated with a 4.6 score (out of five) that they recommend this course.

All SPPH courses are restricted to the School's own students, but students from other programs may be able to register with special permission from the course instructor.



Category: (1)

Category. (1)	TD
Faculty: Pharmaceutical Sciences	<b>Date:</b> 3 June 2013
<b>Department:</b> N/A	Contact Person: Peter Loewen/Glenda
Faculty Approval Date: 31 Oct 2013	MacDonald
Effective Session (W or S): Winter	<b>Phone:</b> PL:71814, GM:23085
Effective Academic Year: 2014	
Effective Academic Tear: 2014	
	glenda.macdonald@ubc.ca
	URL:
	http://www.calendar.ubc.ca/vancouver/inde
	x.cfm?tree=12,213,840,0
Proposed Calendar Entry:	Present Calendar Entry:
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Homepage > Faculties, Colleges, and	Homepage > Faculties, Colleges, and
Schools > The Faculty of Pharmaceutical	Schools > The Faculty of Pharmaceutical
Sciences > Graduate Programs	Sciences > Graduate Programs
Graduate Programs	Graduate Programs
	-
Contents	Contents
Master of Science and Doctor of →	Master of Science and Doctor of →
Philosophy	Philosophy
Graduate Doctor of Pharmacy →	Doctor of Pharmacy →
	Type of Action:
	Add the word "graduate" as a
	descriptor to distinguish between the
	new entry-to-practice PharmD degree
	and the graduate PharmD degree.
	Rationale for Proposed Change:
	The Bachelor of Science in Pharmacy
	(BScPharm) has been the entry-to-practice
	degree for pharmacists in Canada since the
	1940's. The Doctor of Pharmacy (PharmD)
	degree was introduced in the United States
	in 1950, initially as a post-baccalaureate
	degree. Beginning in the 1990's the entry-
	to-practice PharmD degree was phased in
	as the sole professional practice degree in
	pharmacy in the US, with the last
	BScPharm graduates in 2005. There have
	Doct natin graduates in 2005. There have



been several paths to earn a PharmD degree over the ensuing years, all with the same credential name of Doctor of Pharmacy (PharmD). Graduate PharmD programs are being phased out in the US with the change to entry-to-practice PharmD programs, with only 11 of 140 US Pharmacy schools offering a post-baccalaureate program in 2013. These few remaining programs have been developed in order for working professionals holding a Bachelor of Science in Pharmacy to earn the Doctor of Pharmacy degree.

Entry-to-practice PharmD programs have been implemented in four Canadian Pharmacy faculties to date, with the first graduates in 2011. All other schools are in various stages of program planning. The last Bachelor level graduating class at the University of Toronto will be 2014. They will retain their post-baccalaureate PharmD program as a part-time bridging program. UBC is proposing an entry-to-practice PharmD program to begin in 2015.

UBC has been offering a graduate PharmD degree since 1991. The program is well recognized, admitting 8 students per year, and applicants to the program must hold a bachelor's degree in pharmacy. Until there are graduates from the proposed entry-to-practice PharmD program in 2019, there will be a demand for graduates of our current graduate program. Following 2019 our current PharmD program will be phased out.

In the meantime, we believe that adding "graduate" in the Calendar as a descriptor for the graduate PharmD program will help diminish confusion around the credential.

#### **URL:**

http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,213,840,1277



#### **Proposed Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Graduate Programs > Graduate Doctor of Pharmacy

#### **Graduate** Doctor of Pharmacy

The Faculty also offers opportunities for study leading to the **graduate** Doctor of Pharmacy (PharmD) in the field of clinical pharmacy. The **graduate** PharmD Program is open to applicants who possess a BSc in Pharmacy or equivalent and are eligible for registration with the College of Pharmacists of BC. Students must observe the following:

- A student may apply for admission to the program by writing to the graduate PharmD program Admissions Committee, Faculty of Pharmaceutical Sciences.
- 2. Class size is limited. All application materials must normally be received by January 15 to be considered for admission in the same year.
- 3. All students are admitted to the program only at the start of the Winter Session (the beginning of September).
- 4. Applicants for the **graduate** PharmD program must hold a bachelor's degree in pharmacy or equivalent, with 80% or higher in at least 12 credits of coursework, and at least 74% in the remaining coursework in the last two years of the BSc in Pharmacy program and:
  - 1. hold current registration as a pharmacist in BC, or
  - 2. hold registration (Qualifying Examination) with the Pharmacy Examining Board of Canada and be eligible for registration as a qualifying candidate with the

#### **Present Calendar Entry:**

Homepage > Faculties, Colleges, and Schools > The Faculty of Pharmaceutical Sciences > Graduate Programs > Doctor of Pharmacy

#### **Doctor of Pharmacy**

The Faculty also offers opportunities for study leading to the Doctor of Pharmacy (PharmD) in the field of clinical pharmacy. The PharmD Program is open to applicants who possess a BSc in Pharmacy or equivalent and are eligible for registration with the College of Pharmacists of BC. Students must observe the following:

- 1. A student may apply for admission to the program by writing to the PharmD program Admissions Committee, Faculty of Pharmaceutical Sciences.
- 2. Class size is limited. All application materials must normally be received by January 15 to be considered for admission in the same year.
- 3. All students are admitted to the program only at the start of the Winter Session (the beginning of September).
- 4. Applicants for the PharmD program must hold a bachelor's degree in pharmacy or equivalent, with 80% or higher in at least 12 credits of coursework, and at least 74% in the remaining coursework in the last two years of the BSc in Pharmacy program and:
  - 1. hold current registration as a pharmacist in BC, or
  - 2. hold registration (Qualifying Examination) with the Pharmacy Examining Board of Canada and be eligible for registration as a qualifying candidate with the



- College of Pharmacists of BC. Students with questions regarding this eligibility are encouraged to contact the College.
- 5. Applicants who have a bachelor's degree, or its academic equivalent, that does not meet the requirements of section 4 above, but who have had sufficient formal training and relevant professional experience to offset such deficiencies may be granted admission on the approval of the Faculty.
- 6. A residency in hospital or community pharmacy practice is desired, but not mandatory.
- 7. Admission is based on the above criteria, interviews, and reference letters.

**Graduate** Doctor of Pharmacy

Oraciate Boctor of Finantiacy	
First Year	
PATH 415	2
PATH 548	6
PHAR 501	12
PHAR 502	4
PHAR 506	6
PHAR 508	4
PHAR 554	3
PHAR 570	2
Second Year	
PHAR 533	12
PHAR 534	12
PHAR 535	2
Comprehensive <b>graduate</b> PharmD	
Examination	
Total Credits	65

#### **Contact Information**

Faculty of Pharmaceutical Sciences 2405 Wesbrook Mall

Vancouver, BC V6T 1Z3

Tel: 604.822.4645 Fax: 604.822.3035

Email: graduate.pharmd@ubc.ca

Web:

- College of Pharmacists of BC. Students with questions regarding this eligibility are encouraged to contact the College.
- 5. Applicants who have a bachelor's degree, or its academic equivalent, that does not meet the requirements of section 4 above, but who have had sufficient formal training and relevant professional experience to offset such deficiencies may be granted admission on the approval of the Faculty.
- 6. A residency in hospital or community pharmacy practice is desired, but not mandatory.
- 7. Admission is based on the above criteria, interviews, and reference letters.

**Doctor of Pharmacy** 

First Year	
2	
6	
12	
4	
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3	
2	
Second Year	
12	
12	
2	
Comprehensive PharmD Examination	
_	
65	

#### **Contact Information**

Faculty of Pharmaceutical Sciences

2146 East Mall

Vancouver, BC V6T 1Z3

Tel: 604.822.4645 Fax: 604.822.3035

Email: Ms. Julie Sureweere. Administrative

Assistant

http://www.pharmacy.ubc.ca/programs/degree-programs/PharmD

Web:

 $\frac{www.pharmacy.ubc.ca/pharmdprogram/ind}{\underline{ex}}$ 

## **Type of Action:**

- Add the words "Graduate" to distinguish between the new entry-to-practice PharmD degree and the graduate PharmD degree.
- Correct the address listed under Contact Information.
- Correct the email address and URL for the program website

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

Adding "graduate" in the Calendar as a descriptor for the graduate PharmD program will help diminish confusion around the credential. Consistent reference to the graduate degree as the "graduate PharmD" throughout the Calendar will be a key part of distinguishing between the two different programs.



Category: (1)

Faculty: LAW Date: February 12, 2013

Department: LAW Contact Person: Shigenori Matsui

Faculty Approval Date: 2013-03-18 Phone: 604-822-5592 Email: matsui@law.ubc.ca

Effective Session 2014 Summer

**URL:** 

http://www.calendar.ubc.ca/vancouver/cour

ses.cfm?page=name&code=LAW

**Type of Action:** Create new course.

Proposed Calendar Entry: Present Calendar Entry:

LAW 340 (3) Comparative Law

Basic theory of comparative law and the

differences between the civil law tradition and the common law tradition.

**Rationale:** 

This course has been offered as Comparative Law numerous times under Law 342 (1-4)d Topics in Comparative Law. It is logical to formalize this as a new course, as the Associate Dean and the current instructor plan to continue offering Comparative Law regularly. The new name and description will be easier for students to understand. Law 342 will remain to accommodate other possible courses. We will also 'fix' the credits at 3 credits to reflect the new stable content of the course and recent numbering changes to the curriculum.



Category: (1)

Faculty: LAW Date: February 12, 2013

Department: LAW Contact Person: Shigenori Matsui

Faculty Approval Date: 2013-03-18 Phone: 604-822-5592 Email: Matsui@law.ubc.ca

Effective Session 2014 Summer

http:/

URL:

http://www.calendar.ubc.ca/vancouver/cour

ses.cfm?page=name&code=LAW

Proposed Calendar Entry: Present Calendar Entry:

None.

Constitutional Law Type of Action: Create new course.

Comparison of the constitutional history, government structure and powers, and protection of individual rights between the United States and Canada.

LAW 348 (3) Comparative

**Rationale:** 

This course has been offered as Comparative Constitutional Law numerous times under Law 342 (1-4)d Topics in Comparative Law. It is logical to formalize this as a new course, as the Associate Dean and the current instructor plan to continue offering Comparative Constitutional Law regularly. The new name and description will be easier for students to understand. Law 342 will remain to accommodate other possible courses. We will also 'fix' the credits at 3 credits to reflect the new stable content of the course and recent numbering changes to the curriculum.

Category: (1)

Faculty: LAW
Department: LAW
Date: 6 February 2013
Contact Person: Catherine Dauvergne

Faculty Approval Date: 2013-03-18 Phone: 827-3055

Effective Summer Session 2014

Email: dauvergne@law.ubc.ca

**URL:** 

http://www.calendar.ubc.ca/vancouver/courses

.cfm?page=name&code=LAW

Proposed Calendar Entry: Present Calendar Entry:

tribunals. Course content does not

duplicate Law 377.

LAW 378 (3) Refugee Law

LAW 378 (1-3)d Issues in Immigration and Refugee Law

International and Canadian refugee law; the *Refugee Convention* and its implementation in Canada; the practice of refugee law in Canadian courts and

**Type of Action:** Change this course from a pilot 'topics in' format to a formalized course on Refugee Law. Change course credits to 3.

**Rationale:** 

This course has been offered as Refugee Law numerous times. It is logical to formalize this change, as the Associate Dean and the current instructor plan to continue offering Refugee Law regularly. The new name and description will be easier for students to understand. We will also 'fix' the credits at 3 credits to reflect the new stable content of the course and recent credit allocation changes to the curriculum.



Category: (1)

Faculty: LAW Date: March 16, 2011

Department: LAW Contact Person: Shigenori Matsui

Faculty Approval Date: 2013-03-18 Phone: 604-822-5592 Email: matsui@law.ubc.ca

Effective Session 2014 Summer

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

Proposed Calendar Entry: Present Calendar Entry:

LAW 425 (3) Cyberspace Law

Legal issues arising from the development of the Internet and

cyberspace.

**Type of Action:** Create new course.

**Rationale:** 

URL:

This course has been offered as Cyberspace Law numerous times under Law 426 (1-4)d Topics in Law and Technology. It is logical to formalize this as a new course, as the Associate Dean and the current instructor plan to continue offering Cyberspace Law regularly. The new name and description will be easier for students to understand. Law 426 will remain to accommodate other possible courses. We will also 'fix' the credits at 3 credits to reflect the new stable content of the course and recent numbering changes to the curriculum.



Category: (1)

Faculty: Pharmaceutical Sciences

**Department:** n/a

**Faculty Approval Date:** 13 Feb 2014 **Effective Session (W or S):** Winter T1 **Effective Academic Year:** 2014/15

**Date:** 8 Jan 2014

Contact Person: Marion Pearson

**Phone:** 24933

Email: marion.pearson@ubc.ca

**URL:** PHAR

## **Proposed Calendar Entry:**

PHAR 409 (3) Renal Pharmacotherapeutics Case-based approach to the pathophysiology, pharmacology, clinical pharmacokinetics, and pharmacotherapy in nephrology with emphasis on the integration and application of fundamental principles to clinical situations in class and during their experiential component.

Prerequisite: Successful completion of all required courses in the first three years of the pharmacy curriculum.

### **Present Calendar Entry:**

N/A

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

Create a new course.

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

This course has been offered as a section of PHAR 450 Selected Topics (version B), and is in high demand.

The course is designed for 4<sup>th</sup> year students in the entry-to-practice program with a desire to learn more about pharmacotherapeutics.

Renal pharmacotherapeutics is a course designed to improve health outcomes for patients with kidney disease by developing practice ready pharmacists who are comfortable managing complex pharmacotherapy in this specialized population, in both institutionalized and community settings.

This course is delivered as case-based engaging lectures designed to draw on the knowledge and skills students have acquired from previous required courses including PHAR 315, 441, 442, 451, 452, 471, 472, and 498 in order to facilitate understanding of more in-depth material. Students are expected to apply their previous and new renal pharmacotherapeutic knowledge during the experiential component of the course



though their interactions with renal pharmacotherapeutic experts and patients, and provide pharmaceutical care for renal patients with multiple co-morbidities requiring complex medication regimens.

Very few existing Pharmacy courses in North America offer the perspective of an experiential component within their existing course structure.

The Faculty is following through with a plan to increase elective course offerings to meet the needs of the experiential education requirements and of the larger class size we are now enrolling.

The Faculty plans to continue developing more electives designed to address specific disease states, which students are expected to know for their patient/client selection and caseload expectations during experiential education. This course will provide greater opportunities for students to develop specialized knowledge and skills upon graduation.

When the course was offered as PHAR 450B, enrolment had to be increased due to demand, and accommodated 18 students.

#### **☒** Not available for Cr/D/F grading

Rationale for not being available for Cr/D/F: Students in the Bachelor of Science in Pharmacy program are permitted to take a maximum of 6 credits of non-pharmacy approved electives to satisfy degree requirements in compliance with the University's Credit/D/Fail policy. This course is a non-pharmacy approved elective, and therefore cannot be taken for Cr/D/F. The course is not open to students outside of the program.

Contact: Dr. Bill Ramey Faculty Approval Date: February 27, 2014

Phone: 822-3300 Email: wramey@mail.ubc.ca

#### ATMOSPHERIC SCIENCE

Effective Date for Change: 14S Proposed Calendar Entry:

**ATSC 113 (3) Applied Meteorology** 

Atmospheric-science principles elucidated by case studies applied to snow sports, sailing, surfing, soaring, and flying. [3-0-0]

**Present Calendar Entry:** 

Action: Create new course.

Rationale: In today's wired world, individuals access weather maps and forecasts with unprecedented ease yet only a small fraction of people have adequate understanding of how the atmosphere works to get the most utility and safety from these uncertain data. By using casestudy scenarios in sailing, surfing, soaring, flying and snow sports that require informed decisions, students will learn how knowledge of the atmospheric science principles might enhance their competitive edge or their margin of safety. No entry-level course currently exists in Atmospheric Science. EOAS seeks to raise the profile of Atmospheric Science by offering this course.

**Supporting Documents: SCI-13-2-ATSC 113** 

#### **BIOLOGY**

Effective Date for Change: 14S Proposed Calendar Entry:

BIOL 361 (3) Physiology of Sensory, Nervous and Muscular Systems.

Excitable membranes, neural signaling and transmission; transduction and coding of sensory information; muscle contraction. [3-0-0]

Prerequisite: BIOL 200. One of BIOL 260 or BIOL 201 recommended.

## **Present Calendar Entry:**

BIOL 361 (2) Introduction to Physiology

Energetics and excitable membranes of nerve and muscle. [2-0-1]

Prerequisite: BIOL 200. One of BIOL 260 or BIOL 201 recommended.

**Action:** Modify the course title and description. Increase the number of credits from 2 to 3 by modifying the vector to 3 lecture hours per week.

**Rationale:** The current title is too general and does not accurately reflect the content of the course. Moreover, a very similar title is more accurately used by BIOL 260. The current course description is updated to more accurately reflect the course content.

BIOL 361 is a large enrolment course (about 350 students) that currently runs with 2-credits of lecture and a 1-hour tutorial. In practice, the tutorial hour introduces new material and functions like a lecture hour. Therefore, by increasing the number of credits from 2 to 3, this proposal brings the number of credits in line with the amount of material the students are expected to learn. The 1-hour tutorial is no longer needed because the instructors in BIOL 361 have new technologies at their disposal (i.e., clickers) that enable them to evaluate student understanding of the material during lecture.

**Supporting Documents: SCI-13-2-BIOL 361** 

# Effective Date for Change: 14S Proposed Calendar Entry:

BIOL 364 (3) Animal Physiology.

Cardiovascular, respiratory, and osmoregulatory physiology. Preference will be given to students who are in Biology, Nutritional Sciences, and Honours Biophysics. [3-0-0]

Prerequisite: BIOL 204 and one of BIOL 260, BIOL 361.

#### **Present Calendar Entry:**

BIOL 364 (2) Animal Physiology.

Cardiovascular, respiratory, and osmoregulatory physiology. Preference will be given to students who are in Biology, Nutritional Sciences, and Honours Biophysics. [2-0-1]

Prerequisite: BIOL 204 and one of BIOL 260, BIOL 361.

**Action:** Delete the tutorial hour. Increase the number of credits from 2 to 3 by modifying the vector to 3 lecture hours per week.

**Rationale:** BIOL 364 is a large enrolment course (about 200 students) that is in high demand from Biology, Nutritional sciences and Honours Biophysics students and is currently listed as a 1-term, 2-credit lecture course in animal physiology with a 1-hour tutorial. In practice, however, the tutorial hour introduces new material and functions like a lecture hour due to the large amount of material that needs to be covered in the class. By dropping the tutorial hour and increasing the number of lectures from 2 to 3, this proposal brings the number of credits in line with the amount of material being taught to the students. The 1-hour tutorial is no longer needed because the instructors in BIOL 364 have new technologies at their disposal (i.e., clickers) that enable them to evaluate student understanding of the material during lecture.

**Supporting Documents: SCI-13-2-BIOL 364** 

#### CELLULAR AND PHYSIOLOGICAL SCIENCES

Effective Date for Change: 14W Proposed Calendar Entry:

CAPS 200 (3) Biomedical Research: Essential Skills and Concepts

Analysis of the underlying questions and assumptions, experimental approach, results and significance of work described in selected biomedical research presentations. [3-0-0].

Prerequisites: BIOL 200; limited to students in second year.

**Present Calendar Entry:** 

**Action:** New Course

Rationale: Second-year undergraduate students often have little idea of what science is about or how it is done. The study of knowledge does not automatically confer understanding about why or how that knowledge was obtained. This course is designed to provide early exposure to high impact research and foster curiosity about the process of scientific discovery and the cellular, anatomic and physiologic underpinnings of biomedical research to provide a solid foundation for students to explore their own research endeavors.

The course is limited to second year students to ensure early exposure, comparable background and abilities.

**Supporting Documents: SCI-13-2-CAPS 200** 

#### EARTH AND OCEAN SCIENCES

Effective Date for Change: 14S Proposed Calendar Entry:

**EOSC 240: Site Investigation (3)** 

Theory and practice of site investigation for geological engineers, including background studies, field work, remote sensing, development of ground models, importance of geological variability and uncertainty. Impacts on design, project risk and decision making.
[3-0-0]

**Pre-requisite: EOSC 210** 

**Co-requisite: CIVL 210** 

**Present Calendar Entry:** 

**Action:** Create new course.

**Rationale:** This new core course, approved by the Geological Engineering Board of Study in December 2013, will replace CIVL 235 (Plane Surveying) in Applied Science's Geological Engineering program (administered by the Department of Earth, Ocean and Atmospheric Sciences). Much of the CIVL 235 course content is no longer relevant for geological engineers, and students would be better served by a course that exposes them to new technologies being used in practice. The new course will also provide students with an important second-year design experience and address a key programlevel learning goal of enabling students to recognize both geological variability and uncertainty and their impact on design, project risk and decision making.

**Supporting Documents: SCI-13-2-EOSC 240** 

#### **ENVIRONMENTAL SCIENCES**

Effective Date for Change: 14S Proposed Calendar Entry:

ENVR 400 (6) Community Project in Environmental Science

Instructor-guided collaboration between student teams and community partners on community-based environmental science projects. Teams articulate project questions and goals, devise methods, conduct research and communicate results. Credit will be given for only one of ENVR 400 or ENVR 449.

[3-0-0;3-0-0]

Prerequisite: ENVR 300.

## **Present Calendar Entry:**

ENVR 400 (3) Research Project in Environmental Science

Students working in teams apply research methods to a problem in environmental science, under the guidance of faculty members. Credit will be given for only one of ENVR 400 or ENVR 449.

Prerequisite: ENVR 300.

**Action:** Revise course title. Revise course description. Increase credits from 3 to 6. Add vector.

**Rationale:** ENVR 400 is the capstone

experience wherein Major Environmental Sciences students apply the knowledge and skills acquired throughout the specialization to the research needs of local community partner organizations. The revised title and course description clarify that ENVR 400 is distinct from a research thesis course. The number of students in the Major has increased to about 60. In 2013 ENSC faculty developed a more structured approach to working with community partners to ensure strong research opportunities for this large number of students and to retain meaningful community impact. They worked with the Centre for Community Engaged Learning (CCEL) to develop a revised ENVR 400 framework that incorporates principles of community-based research. Partnerships were developed with the Social Ecological Economic **Development Studies** (SEEDS) program at UBC and community organizations that offer long-term research

agendas such as the David Suzuki Foundation, Metro Vancouver, the Society Promoting Environmental Conservation and Village Vancouver.

Due to activities such as off campus meetings with community partners, collaborative research project scoping, student research team meetings, and in some instances having to prepare Behavioural Research Ethic Board (BREB) applications, students currently need to commit additional hours to the course outside of regular class time to ensure high quality, ethical research. The enhanced elements of collaboration and community involvement that contribute to a more intensive learning process create additional demands on students' time. Inclass requirements remain the same. Major ENSC students use these projects as examples of their expertise and competency to gain employment or job interviews and a project with reduced scope would be less effective in facilitating the transition from classroom to career, so we have chosen to increase the course from 3 to 6 credits to recognize the time put in by students to achieve the end results. The redesigned 6 credit course recognizes the time required by student teams to achieve the end goals. There is no net increase in instructor time or resources. Half of the course credits (3 credits) will support the process of doing the projects, with team building activities, instruction for proposal writing, panel discussions on communicating science, oral progress reports, and individual project consultations. The other 3 credits will be dedicated as team work-time. A vector establishes the hours that students spend in class each term.

**Supporting Documents: SCI-13-2-ENVR 400** 

#### **PHYSICS**

Effective Date for Change: 14S Proposed Calendar Entry:

ENPH 253 (5) Introduction to Instrument Design

Practice in engineering design and instrument development including mechanical and electrical design, and communications with sensors, actuators. Micro-controller implementation and system integration.

Engineering design review process and presentations. Engineering communication in design and product release. [3-6-0]

Prerequisite: ENPH 259

# **Present Calendar Entry:**

ENPH 253 (3) Introduction to Instrument Design

Practical laboratory exposure to instrument bread-boarding including simple mechanical and electrical design, and communications with sensors, actuators. Micro-controller implementation and design. [1-6-0]

Prerequisite: One of ENPH 259, PHYS 259, PHYS 209.

Corequisite: APSC 203.

**Action:** Update the course description, credits, and vector. Delete Co-requisite. Remove PHYS 259 and PHYS 209 as pre-requisites.

Rationale: Previous attempts at integrating technical communication with engineering practice have indicated that students benefit from a tighter integration, where the communication content is delivered in conjunction with the engineering content, and where communication practice is tied to laboratory reports and presentations. Accordingly, we are increasing the communication component of ENPH 253 and removing the requirement for APSC 203. PHYS 259 was renamed a few years ago so PHYS 259 is no longer available. All the students enrolling in ENPH 253 will have ENPH 259 as a program requirement. PHYS 209 is no longer appropriate to serve as a prerequisite for ENPH 253.

ENPH 259 (3) Experimental Techniques

Basic experimental techniques in acquisition, analysis, and presentation and **communication** of data and **technical results.** [2-3-0]

Prerequisite: One of APSC 176, ENGL 110, ENGL 111, ENGL 112, ENGL 120, ENGL 121 and either (a) all of PHYS 108, PHYS 109 or (b) one of PHYS 102, PHYS 153 or (c) SCIE 001 or (d) all of PHYS 157, PHYS 158, PHYS 159.

### **Present Calendar Entry:**

ENPH 259 (2) Experimental Techniques

Basic experimental techniques in acquisition, analysis, and presentation of data. [1-3-0]

Prerequisite: Either (a) all of PHYS 108, PHYS 109 or (b) one of PHYS 102, PHYS 153 or (c) SCIE 001.

Corequisite: APSC 202.

**Action:** Update the course description, credits, and vector. Update the prerequisites. Delete Corequisite

Rationale: Previous attempts at integrating technical communication with engineering practice have indicated that students benefit from a tighter integration, where the communication content is delivered in conjunction with the engineering content, and where communication practice is tied to laboratory reports and presentations. Accordingly, we are increasing the communication component of ENPH 259 and removing the requirement for APSC 202, so the prerequisites for APSC 202 will be merged into the prerequisites for ENPH 259 as well. PHYS 153 is being split into PHYS 157, 158 and 159 so the prerequisites need to be updated.

PHYS 157 (3) Introductory Physics for Engineers I

Heat, thermodynamics, oscillations, waves, and sound. Please consult the Faculty of Science Credit Exclusion List: www.students.ubc.ca/calendar/index.cfm?tree =12,215,410,414 [3-0-1]

Prerequisite: One of PHYS 12, PHYS 100.

Corequisite: One of MATH 100, MATH 102, MATH 104, MATH 110, MATH 120, MATH 180, MATH 184

### **Present Calendar Entry:**

**Action** Create a new course.

**Rationale:** PHYS 153(6) is a two term course which is core to the first year engineering program. The two term course structure poses difficulties for students who do poorly in the first term of the course, and for those who do not progress satisfactorily in the first term corequisite MATH course. They cannot withdraw from the PHYS 153 course but may not have the background to succeed in the second term of the course. In cooperation with the Faculty of Applied Science, we are proposing to split PHYS 153 (6 credits) into three courses with the same total content but one more credit-PHYS 157 (3 credits), PHYS 158(3 credits) and a lab course PHYS 159 (1 credit). PHYS 157 will have the same lecture content as the first term of PHYS 153; PHYS 158 will have the same lecture content as the second term of PHYS 153: and PHYS 159 will have all the lab content of PHYS 153. Splitting PHYS 153 in this way and offering PHYS 157 in both terms, along with the lecture component of PHYS 102 in the summer semester as a replacement for PHYS 158, will enable students who fail either PHYS 157 or 158 a chance to start second year on schedule with other engineering students. Splitting PHYS 153 makes it possible to enforce necessary pre- and co-requisites, and it allows the Faculty of Applied Science to perform an accurate review the progress of students at the end of their first term in the program. In conjunction with this curriculum change, mechanisms have been put in place to support students who don't pass all courses in first term, such that they have opportunities to repeat or take equivalent courses in a timely fashion.

PHYS 158 (3) Introductory Physics for Engineers II

Electricity and magnetism, DC and AC circuits, optics. Please consult the Faculty of Science Credit Exclusion List: www.students.ubc.ca/calendar/index.cfm?tree =12,215,410,414 [3-0-1]

Pre-requisite: PHYS 157.

Co-requisites: One of MATH 101, MATH 103, MATH 105, MATH 121.

**Present Calendar Entry: none** 

**Action** Create a new course.

**Rationale:** PHYS 153(6) is a two term course which is core to the first year engineering program. The two term course structure poses difficulties for students who do poorly in the first term of the course, and for those who do not progress satisfactorily in the first term corequisite MATH course. They cannot withdraw from the PHYS 153 course but may not have the background to succeed in the second term of the course. In cooperation with the Faculty of Applied Science, we are proposing to split PHYS 153 (6 credits) into three courses with the same total content but one more credit-PHYS 157 (3 credits), PHYS 158(3 credits) and a lab course PHYS 159 (1 credit). PHYS 157 will have the same lecture content as the first term of PHYS 153; PHYS 158 will have the same lecture content as the second term of PHYS 153: and PHYS 159 will have all the lab content of PHYS 153. Splitting PHYS 153 in this way and offering PHYS 157 in both terms, along with the lecture component of PHYS 102 in the summer semester as a replacement for PHYS 158, will enable students who fail either PHYS 157 or 158 a chance to start second year on schedule with other engineering students. Splitting PHYS 153 makes it possible to enforce necessary pre- and co-requisites, and it allows the Faculty of Applied Science to perform an accurate review the progress of students at the end of their first term in the program. In conjunction with this curriculum change, mechanisms have been put in place to support students who don't pass all courses in first term, such that they have opportunities to repeat or take equivalent courses in a timely fashion.

PHYS 159 (1) Introductory Physics Laboratory for Engineers

A laboratory course with emphasis on experimental design, measurement and analysis techniques. Please consult the Faculty of Science Credit Exclusion List: www.students.ubc.ca/calendar/index.cfm?tree =12,215,410,414 [0-3-0]

Prerequisite: One of PHYS 12, PHYS 100.

Corequisite: One of PHYS 157, PHYS 158

**Present Calendar Entry: none** 

**Action** Create a new course.

Rationale: PHYS 153 is being split into two separate lecture courses, PHYS 157 and PHYS 158. It also had a weekly 3 hour laboratory component in the Winter term. Over the past 3 years this laboratory component has been completely revised with substantially increased content and learning goals so it is being separated off from the lecture courses into a stand-alone lab course worth one credit. Separating the lab into an independent course will allow better flexibility in scheduling and it will allow students that fail the first term lecture course to independently complete the lab requirement while re-taking the lecture course.

PHYS 219 (2) Intermediate Experimental Physics I

Analog electronics and amplifiers, digital electronics, analog-to-digital converters and an introduction to use of computers in data analysis and simulations.
[1-3-0]

Prerequisite: Either (a) all of PHYS 108, PHYS 109 or (b) PHYS 102 or (c) all of PHYS 158, PHYS 159 or (d) SCIE 001.

Corequisite: One of MATH 200, MATH 217, MATH 226.

### **Present Calendar Entry:**

**Action:** Create a new course PHYS 219. This is part of a plan to split PHYS 209 worth three credits into two separate courses PHYS 219 worth two credits and PHYS 229 worth one credit.

**Rationale:** Physics and astronomy students typically start their first co-op job in the 2<sup>nd</sup> term of 2<sup>nd</sup> year. While they are on co-op work terms the course is marked as unfinished. The incomplete course subsequently causes some students to be ineligible for the awards on their return in third year because they did not complete enough credits in the Winter session. We are proposing to split the original course PHYS 209 into two separate new courses PHYS 219 and PHYS 229 so one course can finish in each term. This split will eliminate the incomplete standing caused by the current course.

PHYS 229 (1) Intermediate Experimental Physics II

Thermodynamics experiments, modern physics experiments and use of computers in data analysis. [0-3-1\*]

**Prerequisite: PHYS 219** 

**Corequisite: MATH 215** 

### **Present Calendar Entry:**

**Action:** Create a new course PHYS 229. This is part of a plan to split PHYS 209 worth three credits into two separate courses PHYS 219 worth two credits and PHYS 229 worth one credit.

Rationale: Physics and astronomy students typically start their first co-op job in the 2<sup>nd</sup> term of 2<sup>nd</sup> year. While they are on co-op work terms the course is marked as unfinished. The incomplete course subsequently causes some students to be ineligible for the awards on their return in third year because they did not complete enough credits in the Winter session. We are proposing to split the original course PHYS 209 into two separate new courses PHYS 219 and PHYS 229 so one course can finish in each term. This split will eliminate the incomplete standing caused by the current course.

# **STATISTICS**

Effective Date for Change: 14S Proposed Calendar Entry:

STAT 357 (4) Stochastic Signals and Systems

Stochastic behaviour of signals and systems (e.g., communication systems); discrete and continuous probability; random processes; modeling and identification of linear time-invariant systems; binary hypothesis testing and decision making. [3-0-2]

Prerequisite: EECE 269.

**Equivalency: EECE 357.** 

**Present Calendar Entry:** 

**Action:** Create new course.

Rationale: This course is being created in collaboration with the Department of Electrical & Computer Engineering (ECE) and will be cross-listed with EECE 357. The primary purpose of this course is to provide material to ECE students in the context of applications from the domain. This course replaces STAT 251 in the Electrical Engineering Program. It is beneficial for students in this program to see this material within the ECE context. The secondary purpose of the course is to increase elective offerings for students in Statistics programs and other programs. The cross-listing reflects both the dual purpose of the course and the equal partnership between the two departments.

To: Senate Curriculum Committee From: Angela Redish, Acting Academic Director

UBC Vantage College Date: March 17th, 2014

Re. Definition of the International Program in Vantage College

In March of 2012, the Vancouver Senate approved the creation of the UBC Vantage College with the following goals:

- expansion of the number and diversity of international students on campus;
- development of a living laboratory of scholarly teaching, using leading pedagogical, administrative and ethnological approaches to better understand how international students learn; and,
- contributing to UBC's financial sustainability.

The International Student Initiative has been extraordinarily successful since 1996 in recruiting students from schools around the world who have flourished at UBC and found success after graduation in further education or directly in careers locally and globally. UBC admits only high-quality undergraduates, the same kinds of students that many top universities also seek to enroll. Diversification of the kinds of schools from which UBC recruits is necessary if we are to continue to be successful in this endeavor. The Vantage College International Program is one initiative that can contribute, by reaching students not in the international schools offering high-quality education in English but in schools offering strong national curricula with less exposure to learning in English.

Also created was a new student classification, the International Program student. The first cohort of students is being recruited and admitted now for a start in August 2014. The students are "international secondary school students who demonstrate a strong potential to succeed in university, but who may benefit from smaller class sizes and additional academic and social supports". Specifically, the students will have strong academic records in high schools the curricula of which have been assessed by UBC as of sufficient strength to meet admission requirements but will not meet UBC's English Language Admission Standard when they enter the International Program. Therefore, some of the additional support will be for the development of the ability to operate successfully in an academic environment using English.

Since last spring, faculty have been hired in or seconded from several departments in the faculties of Arts and Science to work on developing the International Program. Additional faculty members are being recruited now to participate in further program development and to meet the anticipated instructional needs. Using mostly existing UBC courses offered by those two faculties and the Faculty of Education, the International Program is being designed to prepare students both academically and culturally for entry with 2<sup>nd</sup> year standing into a UBC degree (B.A. or B.Sc. in the first instance) over 11 months of instruction and upon completion of the program. Additional academic and language support will be provided through VANT courses as proposed here. When the College was created, its name had not been chosen and Senate gave it the authority to offer courses names "IP\*\*". Permission is now sought to change that code to "VANT" as noted in the specific course proposals that follow.

Admission to the College would be driven by the same principles as all UBC admissions:

- Alignment with UBC goals
- Evidence-based
- Excellence of fit: admissions will identify applicants who are most likely to prosper at UBC
- Fairness and integrity of process

1

<sup>&</sup>lt;sup>1</sup> Senate minutes, March 2013.



# **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)

Faculty: UBC Vantage College

**Department:** 

Faculty Approval Date: Feb. 4, 2014

**Effective Date for Change:** 14S

**Date:** March 17th, 2014

**Contact Person:** Joanne Fox

Phone: 604-827-0339 Email: joanne@msl.ubc.ca

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

### **Proposed Calendar Entry:**

#### **Program Requirements**

Students are required to take courses designed to prepare them for entry to participating undergraduate degree programs and UBC Vantage College reserves the right to limit student enrolment accordingly. Specific course requirements will be set out by the College from time to time and will be adjusted to synchronize with undergraduate degree program first-year curricula. With permission of the College, students may take up to 6 credits of 100-level UBC coursework not included in the 11-month International Program.

# **UBC Vantage College International Program Streams**

# Arts Stream

## **Students must complete:**

- GEOG 121 and GEOG 122
- LLED 200<sup>1</sup>
- POLI 100 and POLI 220
- PSYC 102 and PYSC 208
- VANT 140<sup>1</sup>
- VANT 148 and VANT 149
- WRDS 150<sup>2</sup>
- Elective<sup>3</sup>

#### **Total Credits**

37 credits

<sup>1</sup>Credits will not count towards requirements for a Bachelor of Arts degree at UBC.

<sup>2</sup>A 6-credit version of WRDS 150 will fulfill the

### **Present Calendar Entry:**

#### **Program Requirements**

Students are required to take courses designed to prepare them for entry to participating undergraduate degree programs and UBC Vantage College reserves the right to limit student enrolment accordingly. Specific course requirements will be set out by the College from time to time and will be adjusted to synchronize with undergraduate degree program first-year curricula. With permission of the College, students may take up to 6 credits of 100-level UBC coursework outside of the College.

Students in the International Program failing two or more courses will be required to withdraw. Subject to approval by the College and payment of a supplemental fee, students failing one course will be able to re-take the course during a supplemental term.

Action: Add details about program requirements, specifically by listing courses included in the UBC Vantage College International Program. Specify that the additional UBC courses that may be permitted are in addition to those included in the 11-month International Program.

#### Rationale:

The International Program (IP) is a new

1

Saculty of Arts writing requirement for Arts students in the International Program.

<sup>3</sup>In consultation with UBC Vantage College program advisors, students select a 3-credit Arts elective course.

# Science Stream Students must complete:

- One of EOSC 110 or CPSC 110
- CHEM 121 and CHEM 123<sup>4</sup>
- LLED 200<sup>5</sup> and LLED 201<sup>5</sup>
- MATH 110 or MATH 100
- MATH 101
- PHYS 107 and PHYS108 and PHYS 109
- SCIE 113
- VANT 140<sup>5</sup>
- VANT 148 and VANT 149

Total Credits 41-44 credits<sup>6</sup>
<sup>4</sup>Students preparing for some specializations will not need to take CHEM123

<sup>5</sup>Credits will not count toward requirements for a Bachelor of Science degree at UBC.

<sup>6</sup>Total Credits will depend on the student's academic background and intended area of study in a Bachelor of Science program, i.e., one of the physical or computational sciences.

Students in the **11-month** International Program failing two or more courses will be required to withdraw. Subject to approval by the College and payment of a supplemental fee, students failing one course will be able to re-take the course during a supplemental term.

UBC program designed to prepare students for entry into second year in UBC faculties. Students enrolled in the IP take existing courses offered by the Faculties of Arts, Education, Science and new VANT courses designed to supplement and enhance the learning experience. Specific course offerings that make up the IP are listed here. Project courses that introduce new content (VANT 148, VANT 149) will count towards degree requirements in the Faculty of Arts and Science but support courses in the program will not (LLED 200, LLED 201, VANT 140). See also supporting document.



### **Supporting Document**

UBC Vantage College offers an 11-month International Program for exceptional graduates from school systems that are very different from North America's, and where students are taught in languages other than English.

Students are required to take courses designed to prepare them for entry to participating undergraduate degree programs and UBC Vantage College reserves the right to limit student enrolment accordingly. UBC Vantage College worked with the Faculties of Arts, Education, Science and Departments in each of these Faculties to identify courses that would create a cohesive International Program with particular resonance for international students. Specific course requirements will be set out by the College from time to time and will be adjusted to synchronize with undergraduate degree program first-year curricula. The courses in the International Program will each have dedicated sections restricted to UBC Vantage College students. With permission of the College, students may take up to 6 credits of 100-level UBC coursework not included in the 11-month International Program.

Example Course Schedule, Arts Stream

Term 1	Term 2	Summer Term
GEOG 121 (3)	GEOG 122 (3)	elective (3)
POLI 100 (3)	POLI 220 (3)	
PSYC 102 (3)	PYSC 208 (3)*	
LLED 200 (3)		VANT 140 (1)
WRDS 150 (6)**		VANT 149 (1)
VANT 140 (3)		
VANT 148 (2)		

**Example Course Schedule, Science Stream** 

Example Course Schedule, Science Stream			
Term 1	Term 2	Summer Term	
CHEM 121 (4)	One of EOSC 110	CHEM 123 (4)	
LLED 200 (3)	(3) or CPSC 110 (4)	PHYS108 (3)	
MATH 100 (3)	LLED 201 (3)		
PHYS 107 (3)	MATH 101 (3)		
	PHYS 109 (1)		
	SCIE 113 (3)		
VANT 140 (5)		VANT 140 (2)	
VANT 148 (2)		VANT 149 (1)	

Example Course Schedule, Science Stream (Math 110 option)

Term 1	Term 2	Summer Term
CHEM 121 (4)	One of CPSC 110 (4)	MATH 101 (3)
LLED 200 (3)	or EOSC 110 (3)	Either CHEM 123 (4) or PHYS108 (3)
MATH 110 (3)	LLED 201 (3)	
PHYS 107 (3)*	MATH 110 (3)	
	PHYS 109 (1)	
	SCIE 113 (3)	
VANT 140 (4)		VANT 140 (2)
VANT 148 (2)		VANT 149 (1)

<sup>\*</sup>Issues of prerequisites will be resolved through discussion with the relevant departments

<sup>\*\*</sup> WRDS 150 (6) See Category 1 update, 6-credit version of WRDS 150 from Faculty of Arts



# **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)

Faculty: UBC Vantage College
Department:

Date: March 20th, 2014
Contact Person: Joanne Fox

Faculty Approval Date: March 20<sup>th</sup>, 2014 | Phone: 604-827-0339 | Email: joanne@msl.ubc.ca

**Effective Date for Change:** 14S

**Proposed Calendar Entry:** 

VANT – UBC Vantage College

http://www.calendar.ubc.ca/vancouver/cour
ses.cfm?page=code

**Present Calendar Entry:** 

n/a

**Type of Action:** 

Create new course code: VANT

**Rationale:** 

In March of 2012, the Vancouver Senate approved the creation of the UBC Vantage College with the following goals:

- expansion of the number and diversity of international students on campus;
- development of a living laboratory of scholarly teaching, using leading pedagogical, administrative and ethnological approaches to better understand how international students learn; and,
- contributing to UBC's financial sustainability.

When the College was created, its name had not been chosen and Senate gave it the authority to offer courses names "IP\*\*". Permission is now sought to change that code to "VANT."



# **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)

Faculty: UBC Vantage College

**Department**:

Faculty Approval Date: Feb 4, 2014

Effective Date for Change: 2014S Proposed Calendar Entry:

VANT 140 (1-7) d Content and Language

**Enrichment Tutorials** 

Sustained language support for linked content courses in International Program. Students develop strategies for self-directed learning.

Pre-requisites: None.

Restricted to UBC Vantage College students.

**Date**: March 17<sup>th</sup>, 2014

Contact Person: Dr. Joanne Fox

Phone: 604-827-0339 Email: joanne@msl.ubc.ca

**Present Calendar Entry:** 

N/A

**Type of Action:** Create new course

# **Rationale for Proposed Change:**

In order to successfully transition to UBC Vantage College, students will need help with developing their strategies for selfdirected learning. Additionally, as nonnative users of English, UBC Vantage College students need to be supported with timely, content-course-specific supplementary academic English language instruction. Such instruction is especially beneficial when students use their expanded understanding of how academic language works in context to deepen their engagement with disciplinary knowledge. The purpose of the VANT 140 tutorial is to reinforce student learning and to advance students' disciplinary literacy through heightened understanding of the links between language and the construction of disciplinary knowledge.



# **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)

Faculty: UBC Vantage College

**Department:** 

Faculty Approval Date: Feb 4, 2014 Effective Session (W or S): S

**Effective Academic Year: 2014** 

**Proposed Calendar Entry:** 

VANT 148 (2) UBC Vantage College Projects

Projects linked to topics explored in the UBC Vantage College International Program curricula. [1-0-1; 1-0-1]

Pre-requisites: None

Restricted to UBC Vantage College

students.

**Date:** March 17, 2014

Contact Person: Dr. Joanne Fox

Phone: 604-827-0339 Email: joanne@msl.ubc.ca

**URL:** 

N/A

**Present Calendar Entry:** 

N/A

**Type of Action:** 

Create new course

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

The UBC strategic plan, *Place and Promise*, outlines UBC's commitment to students to provide them with Enriched Educational Experiences (E3s) during their course of study. In their report on E3s at UBC, Sens and Fryer (2012) state that, "Ultimately, the goal is to position educational enrichment practices as a key element of curriculum design, faculty teaching, student development, and student learning expectations." The UBC Vantage College project courses (VANT 148, VANT 149) provide students with enriched educational experiences that help to distinguish the International Program. By integrating learning from multiple sources, in team projects and with peer instruction, UBC Vantage College students will use this project element of the International Program to build and engage with learning communities.

Specifically, VANT 148 will:

• Provide students with opportunities



- to extend and enrich disciplinespecific classroom learning;
- Assist students with transitioning to University and undertaking apprentice scholarship;
- Provide students with the opportunity to engage in multidisciplinary ways of knowing;
- Provide students with an opportunity to apply course concepts through project-based learning, including the creation of learning artifacts for both peers and the wider UBC community;
- Provide students with additional opportunities for acquiring and improving English for Academic Purposes;
- Provide students with the opportunity to work with a faculty mentor; and
- Motivate and inspire students to pursue courses of their interest in 2nd year.

Sens, A., and Fryer, M. (2012). Enriched Educational Experiences at UBC: A Framework for Dialogue and Action. Retrieved from:

 $\underline{http://vpstudents.ubc.ca/files/2012/07/E3\ framework\ rep} \\ ort\_2012\_final.pdf$ 

Supporting documents



# **UBC Curriculum Proposal Form Change to Course or Program**

Category: (1)

Faculty: UBC Vantage College

**Department:** 

Faculty Approval Date: Feb 4, 2014 **Effective Session (W or S):** S **Effective Academic Year: 2014** 

**Proposed Calendar Entry:** 

VANT 149 (1) Multidisciplinary **Research Project** 

Research project that culminates in studentled conference and research presentation. [1-0-1]

Pre-requisites: VANT 148

Restricted to UBC Vantage College

students.

**Date:** March 17, 2014

Contact Person: Dr. Joanne Fox

**Phone:** 604-827-0339 Email: joanne@msl.ubc.ca

**URL**:

N/A

**Present Calendar Entry:** 

N/A

**Type of Action:** Create new course

**Rationale for Proposed Change:** 

The UBC strategic plan, *Place and* **Promise**, outlines UBC's commitment to students to provide them with Enriched Educational Experiences (E3s) during their course of study. In their report on E3s at UBC, Sens and Fryer (2012) state that, "Ultimately, the goal is to position educational enrichment practices as a key element of curriculum design, faculty teaching, student development, and student learning expectations." The UBC Vantage College project courses (VANT 148, VANT 149) provide students with enriched educational experiences that help to distinguish the International Program. By integrating learning from multiple sources, in team projects and with peer instruction, UBC Vantage College students will use this project element of the International Program to build and engage with learning communities.

Specifically, VANT149 will:

• Provide the opportunity for students



to participate in multidisciplinary discussions regarding current theories and issues with their peers both within and outside their selected discipline;

- Provide an opportunity for students to extend their classroom learning by formulating and proposing a guided, collaborative, novice research project;
- Provide opportunity to research and present to their peers as apprentice scholars at the capstone conference;
- Create additional opportunities for students to acquire professional skills, including event planning, networking, leadership and teamwork; and
- Create additional opportunities for students to acquire and improve their English for Academic Purposes skills.

Sens, A., and Fryer, M. (2012). Enriched Educational Experiences at UBC: A Framework for Dialogue and Action. Retrieved from:

http://vpstudents.ubc.ca/files/2012/07/E3 framework report 2012 final.pdf

Supporting documents



Office of the Senate Brock Hall | 2016 - 1874 East Mall

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Vancouver BC V6T 1Z1

1 April 2014

From: Senate Nominating Committee

To: Senate

**Re:** Ad Hoc Committee on Flexible Learning

**Motion:** That Senate establish an Ad Hoc Committee on Flexible Learning,

effective 1 September 2014;

That the Committee have the following terms of reference:

To examine and report on the academic, administrative, and regulatory structure for the delivery of academic programs and learning, and where appropriate to recommend changes with a view of improving the ability of the University to respond to the opportunities and challenges driven by rapid advances in information and communication technologies, to improve student learning, to extend access to UBC, and to strengthen UBC's operating effectiveness;

That the composition of the Committee be as follows:

- 11 Senators (including 3 student members and 1 convocation member)
- Chancellor (ex-officio) (voting)
- President (ex-officio) (voting)
- Registrar (ex-officio) (non-voting)
- An associate vice-president academic, as designated by the Academic Vice-President (ex-officio) (voting)
- Academic Director, Centre for Teaching Learning & Technology (ex-officio) (voting); and

That the Committee report back to Senate by May 2015.



#### **Background:**

The Senate Nominating Committee has considered a proposal from the Senate Teaching & Learning Committee to establish an Ad Hoc Committee on Flexible Learning.

The Committee would bring to Senate's attention the principles it uses to consider the establishment of ad hoc committees of Senate:

Firstly, the matter must be a subject that properly falls under the academic governance mandate of the Senate (The Senate's remit as per Section 37 of the *University Act*).

Secondly, the subject must be an area or topic of significance for Senate's work.

Thirdly, the subject must be either not presently under the jurisdiction of any one standing Senate Committee, or must cross into the jurisdictions of more than one Senate Committee. In the case of the former, the Nominating Committee will consider whether it is more proper to modify a standing committees terms of reference to address the matter, and in the case of the latter the Nominating Committee will consider if it more proper to ask the responsible committees to address the subject jointly.

In this instance, "learning", is of course a core mandate of the University and Senate, and flexible learning – and specifically the ways UBC organizes, supports, and regulates its teaching responsibilities, and how to better support flexibility therein clearly falls under Senate's jurisdiction. The Nominating Committee further recognizes that this subject falls under the remits of a majority of the standing committees of senate, and agrees that a cross-representational approach with senators (ideally with experience from the relevant standing committees and from a variety of faculties), administrative officers, students, and alumni, would provide an appropriate forum for consideration of the subject.

Respectfully,

Dr Rhodri Windsor-Liscombe, Chair

Senate Nominating Committee



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

19 March 2014

To: Senate Nominating Committee

From: Senate Teaching and Learning Committee

Re: Request for the Establishment of a Senate Ad Hoc Committee on Flexible

Learning

Over the past year, Senate and its Committees have been engaging in conversations around Flexible Learning. The University seeks to respond to the opportunities and challenges driven by rapid advances in information and communication technologies and is motivated by opportunities to improve student learning, extend access to UBC, and strengthen UBC's operating effectiveness. Flexible Learning has potentially broad implications across the University and may impact its academic policies and procedures, the types of learning we deliver and how we deliver it to whom, and the physical and technical resources that will be required in order to do so.

The ambits of most Senate Committees, with the potential exceptions of Tributes and Nominating, are involved in the scope of Flexible Learning discussions. A number of joint meetings have been held to enable these conversations; however, the consensus is that while these provide fora for information sharing, they are not the proper venue for deliberative action on an initiative with a scope that is as cross-cutting as Flexible Learning. Flexible learning will shape the future of the University and its programs, and could impact every student, faculty member and unit. It is important that Senate carefully consider how the University's programs and policies can evolve with the changing demands and technologies, while ensuring that its quality and reputation continue to be enhanced.

The Teaching and Learning Committee has come to the conclusion that the structure of the Committees is too bifurcated to facilitate this discussion, and thus recommends that an Ad Hoc Committee of Senate be struck to address this issue. Our initial thoughts were that a group of eleven (11) members sourced from among the Academic Building Needs Committees, Academic Policy, Admissions, Budget, Curriculum, Library and Teaching and Learning Committees would be ideal. Two of the members should be student representatives, and two of the members should be ex-officio Committee members (preferably those ex-officio members designated by the Provost).



While Terms of Reference for the Committee would be up to the Nominating Committee to recommend to Senate, we suggest the following topics for the Ad Hoc Committee to consider:

- The possibility of a definition of credit based on learning outcomes rather than hours spent in different learning activities. Not only will this impact upon the programs offered at the Campus, it may also have cascading effects requiring adjustments to existing university policies including but not limited to the Requirements to Receive a Degree or Diploma (including residency requirements), Term and Examination Scheduling (including minima for teaching days) and definitions of full-time and part-time students. Furthermore, there are issues of external recognition and eligibility the may be impacted (e.g., student loans, study permits, housing eligibility).
- Measuring learning outcomes in our own courses will open the possibility of prior-learning assessment recognition and/or challenge exams, which could require new policy development.
- Students are often granted transfer credit and/or exemptions from prerequisites for credit for courses taken at other institutions. Should this activity extend beyond its current scope? For instance, could the same approach be applied to credit from non-traditional sources (e.g., home-schooling, MOOCs, volunteering, international service)?
- Should transcripts change to note more information about the learning outcomes students achieve?
- Should our flexible courses and programs be cohort based, or should students proceed at their own pace?
- Dual degrees are increasingly attractive to students. Proposals are underway to create dual degrees for bachelors/masters. What are the potential pit falls and to what extent should the University enable "double-counting" of credits beyond what policy already allows?
- Professional and applied courses, certificates, and degrees attract career-focused learners who often learn on a part-time basis. These learners appreciate the flexibility of online courses, as well courses that can be laddered towards a certificate and subsequently into a diploma or degree. How can our policies change to enable lifelong learning at UBC?



• What kinds of learning spaces and Library resources might the University require as flexible learning evolves? Do we have the proper governance structures and procedures in place to ensure that the academic needs of the university are taken into account as new/enhanced buildings and spaces are developed?

While the work of the Ad Hoc Committee may take over a year, we would suggest that the Committee be struck in September 2014 and report back to the Senate in May 2015.

Respectfully submitted,

Kenneth Baimbridge, Chair Senate Teaching and Learning Committee



Office of the Senate

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1 April 2014

From: Senate Student Awards Committee

To: Senate

**Re:** Vantage College Renewable Awards

#### **Background:**

At its meeting of February 19<sup>th</sup>, 2014 Senate reviewed proposed awards from Vantage College and discussed two renewable awards at length: the Vantage College Excellence Award and the Vantage College Entrance Award. The Excellence Award was proposed as an annually renewable award with a value of up to \$45,000 while the Entrance Award was proposed as an annually renewable award with a value of \$7000 annually. The Senate had concerns with the renewable aspects of these awards and referred those aspects of the descriptions back to our Committee.

We took that opportunity to work with Vantage College and the International Student Initiative to take all of the issues Senate had discussed into account. As a result, we returned with two recommendations for Senate with regard to the Vantage College renewable awards that were circulated to Senate via e-mail for approval following the cancellation of the March 2014 meeting. One objection to the email motion was raised in that process, hence the motions below are being proposed at the April meeting, as per Section 23 (d) of the *Rules and Procedures of Senate*.

**Motion:** To reconsider the proposal for the UBC Vantage College Entrance Award

put forward and partially approved at the February 19th, 2014 meeting of

the Senate.

**Rationale:** At this stage in the admissions cycle, Vantage would like to concentrate its efforts on the proper implementation of the larger Excellence Award and bring forward additional renewable awards in later years.

**Motion:** To approve and forward to the Board of Governors for approval the

following description for the UBC Vantage College Excellence Award, thus replacing the description that was partially approved at the

February 19<sup>th</sup>, 2014 meeting of Senate.



#### **UBC Vantage College Excellence Award**

Awards ranging in value up to the full cost of the student's academic program and living cost are offered to students beginning their undergraduate studies at UBC in the UBC Vantage College International Program. The value of each award is dependent on the recipient's financial need. The awards will be renewed for up to three additional years or to degree completion, whichever is less, provided the recipient remains in the top quartile of the year of his/her program and maintains their status as an international student in Canada. Award winners will have their award reviewed annually to assess and update academic progress and financial need. In addition to academic merit, the award will be made on the consideration of financial need. The award is made on the recommendation of UBC Vantage College in consultation with the UBC International Student Initiative. (First Award in the 2014W academic session).

#### **Additional Information:**

Funding for the awards:

- The first year of the award will be funded by UBC Vantage College Student Financial Assistance funds derived from a percentage of the student tuition fees paid by UBC Vantage College students.
- The upper year funding for the award will be funded by the ISI Student Financial Assistance funds derived from a percentage of ISI tuition fees.
- UBC Vantage College and the ISI will collaborate annually to determine an appropriate budget based on both funds which in turn will determine how many new UBC Vantage College Excellence Awards can be offered each year.

#### Renewal:

Students coming in under the UBC Vantage College Excellence Award will be academically outstanding, but likely from economically disadvantaged backgrounds. These international students have no financial safety net in Canada should they fall out of award standing, as they are not eligible for student financial loans or UBC bursaries. The UBC Vantage College Excellence Award students are in this regard in a similar situation as the UBC International Leader of Tomorrow Award winners and Donald Wehrung International Student Award winners. In 2004, the ISI Steering Committee recommended that UBC put in place a financial safety net for international student



recipients of these large need- and merit-based awards. This safety net will be extended to recipients of the UBC Vantage College Excellence Award recipients.

Should students in this award program not meet academic continuation requirements, and if it is deemed by their Faculty that they should continue because they show academic promise, they will fall into bursary status and receive the financial component of their award for one year but lose the award designation. They may re-earn the title of the award if their academic progress is sufficient in the following year. A UBC Vantage College Excellence Bursary is in development and will come forward to Senate at a future meeting to enable this measure.

Respectfully,

Dr. Sue Grayston, Chair

Student Awards Committee



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16 February 2014

From: Senate Student Awards Committee

To: Senate

**Re:** New Awards and Changes to Existing Awards (February 2014)

The Student 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."

Katherine BREARLEY Arts Scholarship – Scholarship(s) totaling \$17,500 have been endowed by friends and family in honour of Associate Professor Emerita Katherine Brearley (BA '35, MA '39, Doctorat Université de Paris) for undergraduate students entering their third or fourth year of study in the Faculty of Arts (Vancouver Campus). Katherine Brearley was a student at UBC in the 1930's and returned for a long career as a faculty member, Assistant Dean of Women and the first Senior Faculty Advisor in the Faculty of Arts. Professor Brearley had a significant impact on the many students she taught, mentored and inspired. Qualified students must have achieved a minimum Grade Point Average of 80% in the previous winter session; and, in their current winter session, students must have officially declared a major/honours/combined specialization. In selecting recipients, consideration is given to both scholarly excellence and the demonstrated ability to work with and lead others in student and community activities at the university, local, national and international level. The awards are made on the recommendation of a selection committee within the Faculty of Arts. (First Award Available in the 2014/2015 Winter Session)

**BRITISH Columbia Dental Association Award in Dentistry** – Two awards of \$2,000 each are offered by the British Columbia Dental Association to student members of the Association entering third and fourth year dentistry at UBC. The students, who are expected to have future distinguished careers in the dental profession and society at large, must have exhibited outstanding qualities in leadership, academics, character and humanity. The awards are made on the recommendation of the Faculty of Dentistry (First Award Available in the 2014/2015 Winter Session)



CANADIAN Institute of Steel Construction Award in Architecture – One or more awards totaling \$3,000 are offered by the Canadian Institute of Steel Construction to full-time graduate students in the School of Architecture and Landscape Architecture. Candidates must be in good academic standing and have completed an architectural design project in the previous 12 months, in which structural steel is used in an innovative manner. The project submitted by the student may have been completed as an assignment within a course taken for credit, or as an entry to an architectural ideas competition. The awards are 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 2013/2014 Winter Session)

**GFTC Legacy Fund Award in Food Science** – Two awards of \$5,000 each, payable at \$2,500 over two years, are offered by the GFTC Legacy Fund to undergraduate students pursuing their second or third year of a BSc in Food Science or a BSc in Food and Nutritional Sciences. The awards are based on academic excellence as well as past work experience and future career goals in the food sector. The first \$2,500 instalment will be received upon entrance to the program and a second \$2,500 will be received in the subsequent year, provided that students continue to meet the award criteria. Awards are made on the recommendation of the Faculty of Land and Food Systems. (First Award Available in the 2014/2015 Winter Session)

**GFTC Legacy Fund Co-op Award in Food Science** – Five awards of \$1,000 each are provided by the GFTC Legacy Fund to undergraduate students pursuing their BSc in Food Science or Food and Nutritional Sciences who have excelled in their co-op work placement. The award is made on the recommendation of the Faculty of Land and Food Systems. (First Award Available in the 2014/2015 Winter Session)

GFTC Legacy Fund Graduate Award in Food Science – One award of \$5,000 is offered by the GFTC Legacy Fund to a graduate student pursuing either an MSc in Food Science, a PhD in Food Science, or a Master of Food Science (MFS). The successful recipient will be selected based on academic excellence as well as past work experience and future career goals in the food sector. The award is made on the recommendation of the Faculty of Land and Food Systems in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2014/2015 Winter Session)



**Peter L. GORDY Memorial Bursary in Geological Sciences** – A \$1,000 bursary is offered by the friends and family of the late Peter Gordy for a student in financial need enrolled in the Bachelor of Science in Geological Sciences Honours Program. Mr. Gordy graduated from UBC with a BA in Geological Sciences in 1955. He then joined Shell Canada's Exploration department and became a highly respected expert on the structural geology of the Rocky Mountains. He was a frequent presenter on the Distinguished Lecture Tour and authored numerous scientific papers. He was always appreciative of the quality education that he received at UBC, and of the bursaries that provided the financial support he needed. Adjudication is made by Enrolment Services. (First Award Available in the 2014/2015 Winter Session)

Dr Lakhbir K JASSAL Graduate Travel Award in Arts – Two awards of \$750 each are offered by Dr Lakhbir K Jassal, to graduate students whose focus of study is in one of the following areas: Human Geography, Anthropology (socio-cultural or medical anthropology focus), Asian Studies, and Asia Pacific Policy Studies (thesis option). The awards are available to assist students with expenses associated with fieldwork or presenting their work at conferences. Candidates must have an excellent academic record, with financial need taken into consideration. The awards are made on the recommendation of the four respective departments, in consultation with the Faculty of Graduate and Postdoctoral Studies, alternating between the Departments of Geography and Anthropology in even-numbered Winter Sessions and the Department of Asian Studies and the Institute of Asian Research in odd-numbered Winter Sessions. (First Award Available in the 2014/2015 Winter Session)

NITEP Aurora Award – An award of \$3,000 has been established in support of a student entering the first year of the Native Indian Teacher Education Program (NITEP). The award may be renewed for up to three years, subject to the student's satisfactory completion of the previous year and enrolment in a following year of study in the NITEP. Only one student receives the award each year. Preference will be given to a mature student in financial need. The award is made on the recommendation of NITEP. (First Award Available in the 2014/2015 Winter Session)

**Kaare NORGAARD Award in Medicine** – An award of \$4,000 is offered by the Norgaard Foundation, administered by the University of Victoria in conjunction with UBC's Faculty of Medicine, to one self-declared Aboriginal medical student enrolled in the Island Medical Program who originates from a community on, or in close proximity



to, Vancouver Island (i.e. BC islands between Vancouver Island and mainland BC, Sunshine Coast), and who demonstrates their experience/interest/capacity to care for and about the health of Aboriginal people. First preference will be given to a first-year student who has completed their pre-med studies at a college or university on Vancouver Island, and second preference to a second, third or fourth-year student who has completed their pre-med studies at a college or university on Vancouver Island. This award is made on the recommendation of the UBC Faculty of Medicine. (First Award Available in the 2014/2015 Winter Session)

**PIERONEK Bursary in Teacher Education -** A \$2,000 bursary has been established by Dr. Florence Pieronek-Blott, Associate Professor Emerita of Language Education and loving mother to Princess Molly. The award is offered to a student in the Teacher Education Program in the Faculty of Education with demonstrated financial need. Adjudication is made by Enrolment Services. (First Award Available in the 2014/2015 Winter Session)

**PMG Landscape Architects Graduate Award** – A \$1,000 award is offered by PMG Landscape Architects to a student in his/her final year who accomplished a high level of academic achievement, demonstrates excellence in design and presentation skills, and exhibits independence and a high level of professionalism. 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 2014/2015 Winter Session)

**SINCLAIR Dental Community Service Award** – A \$1,000 service award is offered by Sinclair Dental in celebration of UBC Dentistry's 50<sup>th</sup> Anniversary. This award recognizes an outstanding fourth-year DMD student who demonstrates leadership, interest and passion in the community and reflects Sinclair's commitment and service to the greater community. (First Award Available in the 2014/2015 Winter Session)

Anne TOUPIN Award in Nursing Leadership – A \$1,000 award has been established by Anne Toupin, Clinical Associate Professor Emerita in the School of Population and Public Health. In recognition of Ms. Toupin's career in and passion for nursing administration, the award is made to a student pursuing Nursing Leadership studies at the graduate level. In addition to academic merit, consideration is given to leadership qualities such as involvement in student affairs, extracurricular activities or community



service. The award is made on the recommendation of the School of Nursing in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2014/2015 Winter Session)

Joseph YU Global Leadership Award – An award of up to \$35,000 is offered to an outstanding female international student from Asia entering her first year of a UBC undergraduate degree path either through Vantage College or direct entry into one of the Faculty's degree programs. Students attending UBC's Vancouver and Okanagan Campuses are eligible. The award is made on the basis of academic excellence, leadership, and financial need with preference given to a student from Hong Kong or China. The awards can be renewed for up to \$35,000 per year for years 2-4 of a UBC four year degree program. The recipient must hold a valid Canadian Study Permit (student visa). The award is made on the recommendation of the International Student Initiative. (First Award Available in the 2014/2015 Winter Session)

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

**#446 Cy and Emerald KEYES Fellowship in Mining Engineering** – Fellowships totalling \$9,500 have been made available by the late Cy and Emerald Keyes to support graduate students in Mining Engineering. The awards are made to Canadian citizens and permanent residents on the recommendation the Department of Mining Engineering, in consultation with the Faculty of Graduate and Postdoctoral Studies.

**<u>How amended</u>**: Name and description of the award were updated to reflect the current names of the program and the department.

#447 Cy and Emerald KEYES Fellowship in Materials Engineering – Fellowships totalling \$12,000 have been made available by the late Cy and Emerald Keyes to support graduate students in Materials Engineering. The awards are made to Canadian citizens and permanent residents on the recommendation of the Department of Mining Engineering, in consultation with the Faculty of Graduate and Postdoctoral Studies.

<u>How amended</u>: Name and description of the award were updated to reflect the current names of the program and the department.



#1370 Russ Patrick Arts Undergraduate Student Research Award – A \$2,000 award has been endowed by Russ Patrick to recognize outstanding achievement in research writing by an Arts undergraduate student. The donors' contribution to the endowment principal has been matched by the Faculty of Arts. Candidates who are interested in this award should contact the Dean of Arts' office for information. Submissions are judged by professional standards and assessed by their ability to communicate the research and its significance to a non-specialist audience. The award is made on the recommendation of a selection committee in the Faculty of Arts, including the Dean of Arts in its membership.

**<u>How amended</u>**: Change in the first line of the calendar description to reflect the actual nature of this award

#1436 Crowe MacKay LLP Scholarship in Accounting – Two \$3,500 scholarships are offered by Crowe MacKay LLP, and the Chartered Accountants Education Foundation, to an undergraduate student enrolled in the Accounting option of the Bachelor of Commerce program at the Sauder School of Business. This award was established to mark the 40th anniversary of (formerly MacKay LLP) and honour the legacy created by the founding partner, Iain MacKay and the other leading partners of Crowe MacKay LLP. This award is made on the recommendation of the Sauder School of Business to a student in good academic standing who has expressed an intention to enter the Chartered Accountant School of Business program immediately following graduation.

<u>How amended</u>: Name and description of the award were updated to reflect the current name of the donor Crowe MacKay LLP.

#1514 Chartered Accountants Education Foundation Desmond O'Brien Memorial Scholarship – This scholarship of \$2,000 has been established as a memorial to the late Desmond O'Brien, F.C.A. by the Institute as a tribute to his contribution to the accounting profession in British Columbia and in Canada. The award is made on the recommendation of the Faculty to a full-time student completing third year Commerce in the Accounting option and proceeding to the fourth year of the programme. The award is made to a student who has high academic standing, is deserving of financial assistance and expresses the intention to become a Chartered Professional Accountant (CPA).

<u>How amended</u>: Updated description of the award to reflect change in the program name from CA to CPA.



#1661 CA Education Foundation Jim Miller DAP Scholarship – Two scholarships of \$1,000 each are offered to students enrolled in the Diploma in Accounting Program at the Sauder School of Business. They are awarded on the recommendation of the School to students with high academic standing and leadership ability who intend to become a Chartered Professional Accountant (CPA).

**How amended**: Updated description of the award to reflect change in the program name from CA to CPA.

#1677 CA Education Foundation Peter Stanley Scholarship – A \$1,200 scholarship is offered to a full-time student entering fourth year in the Accounting Option of the Sauder School of Business. The recipient must be continuing with the Accounting Option, have a high academic standing, express intent to become a Chartered Professional Accountant (CPA), and be deserving of financial assistance. The award is made on the recommendation of the School.

<u>How amended</u>: Updated description of the award to reflect change in the program name from CA to CPA.

#2213 Cy and Emerald KEYES Scholarship in Mining Engineering – Scholarships to a total of \$2,000 have been made available by the late Cy and Emerald Keyes for undergraduate students in Mining Engineering. The awards are made on the recommendation of the Department of Mining Engineering, to students entering the second or higher year of study in Engineering. The scholarships are available only to Canadian citizens and permanent residents.

<u>How amended</u>: Name and description of the award were updated to reflect the current names of the program and the department.

#2215 Cy and Emerald KEYES Scholarship in Materials Engineering – Scholarships to a total of \$8,000 have been made available by the late Cy and Emerald Keyes for undergraduate students in Materials Engineering. The awards are made on the recommendation of the Department of Materials Engineering, to students entering the second or higher year of study in Engineering. The scholarships are available only to Canadian citizens and permanent residents.

<u>How amended</u>: Name and description of the award were updated to reflect the current names of the program and the department.

#2238 Cy and Emerald KEYES Award in Mining Engineering – Awards totalling \$13,500 have been made available by the late Cy and Emerald Keyes for students in Mining Engineering. The awards are made on the recommendation of the Department of Mining Engineering to students demonstrating sound academic progress and promise in the discipline. The awards are available only to Canadian citizens and permanent residents.

<u>How amended</u>: Name and description of the award were updated to reflect the current names of the program and the department.

#3006 Wilhelmina Elizabeth and Herbert Craner Memorial Bursary – Bursaries totaling \$4,500 have been endowed by the Estate of Wilhelmina Elizabeth Craner for students in the Department of Art History, Visual Art and Theory in the Faculty of Arts. Mrs. Craner passed away in 2010. Herbert Craner was an avid artist who painted and created First Nations' masks and totems as well as clay artwork.

**How amended:** Change in the award criteria to ensure consistency with the terms of Mrs. Craner's will.

#5377 N. G. Chakrabarti and Aparna Chakrabarti Memorial Scholarship in Engineering – Scholarships totaling \$1,000 have been endowed for Materials Engineering students who are specializing in Minerals and Metal Extraction by Mr. Swaraj K. and Mrs. Gayatri Chattopadhyay in memory of Mrs. Chattopadhyay's parents, N. G. and Aparna Chakrabarti. 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). Preference is to be given to students who have demonstrated financial need. Recommendations are made by the Department of Materials Engineering and, in case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies.



<u>How amended</u>: Change in the award criteria to ensure consistency with the Purpose as stated in the Endowment Trust Agreement. Added also reference to the Faculty of Graduate and Postdoctoral Studies in the last line.

**#5666 Dr. Aneez Shiraz Mohamed Memorial Award -** Awards totaling \$2,700 have been endowed by friends and family in honour of Dr. Aneez Mohamed. The awards are for cardiology residents who have demonstrated a special interest in medical education and teaching, or display a strong role in curriculum development. This award will serve to carry on Dr. Mohamed's passion and interest in medical education and curriculum development. The awards are made on the recommendation of the Post Graduate Program in Cardiology Committee within the Faculty of Medicine, in conjunction with feedback from trainees.

**How amended**: Change in the title and calendar description from "scholarship" to "award" to reflect actual nature of this award.

**#5698 Sabitri and Sudhin Memorial Student Scholarship** – Scholarships totaling \$1000 are offered by Swaraj K. and Gayatri Chattopadhyay in memory of their Aunt Sabitri and Uncle Sudhin for students in the Faculty of Medicine who are specializing in Oncology. Sabitri and Sudhin both passed away from cancer. Preference will be given to students who have demonstrated financial need. Recommendations are made by the Faculty of Medicine and, in case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies.

<u>How amended</u>: Change in the award criteria to ensure consistency with the Purpose as stated in the Endowment Trust Agreement. Added reference to the Faculty of Graduate and Postdoctoral Studies in the last line.

**#6375 Sociology Graduate Scholarship -** Scholarships totalling \$1625 have been endowed for graduate students pursuing studies in Sociology. The awards are made on the recommendation of the Department of Sociology in consultation with the Faculty of Graduate and Postdoctoral Studies.

<u>How amended</u>: Updated the name of the recommending Department and added reference to the Faculty of Graduate and Postdoctoral Studies.



**#7523 Doctors of BC Bursary -** One hundred and twenty four bursaries of \$1,750 each are offered by Doctors of BC to undergraduate students in the Faculty of Medicine who are student members of Doctors of BC, with demonstrated financial need. Preference for one award of \$1,750 is given to an Aboriginal student. The awards are adjudicated by Enrolment Services.

**How amended**: Name and description of the award were updated to reflect the current name of the donor's organization.

#7604 Chartered Accountants Education Foundation William Rowe Scholarship – A \$2,000 scholarship is available to a full time student completing third year Commerce in the Accounting option and proceeding to the fourth year. The award is made on the basis of scholastic standing and awarded to a student who intends to become a Chartered Professional Accountant (CPA). The award is made on the recommendation of the Faculty.

**<u>How amended</u>**: Updated description of the award to reflect change in the program name from CA to CPA.

#7957 Cy and Emerald KEYES Bursary in Mining Engineering – Bursaries to a total of \$2,000 have been made available by the late Cy and Emerald Keyes for students in Mining Engineering. The awards are made on the recommendation of the Department of Mining Engineering. The bursaries are available only to Canadian citizens and permanent residents.

<u>How amended</u>: Name and description of the award were updated to reflect the current names of the program and the department.

**#8514 The Colin & Lois PRITCHARD Foundation Bursary** – Four bursaries totalling \$3,650 have been endowed by The Colin and Lois Pritchard Foundation to support students in the Southern Medical Program in financial need who demonstrate a commitment to community service and to the practice of medicine. Students must be Canadian citizens. Preference is given to first or second year students who have attended or graduated from a high school located in the Thompson / Okanagan / Kootenay region of BC. Bursaries are adjudicated by Enrolment Services.



<u>How amended</u>: Specified that four bursaries would be offered instead of "bursaries totalling.



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Vancouver BC V6T 1Z1

27 March 2014

From: Senate Student Awards Committee

To: Senate

**Re:** New Awards and Changes to Existing Awards (March 2014)

The Student 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."

**UBC Vantage College Entrance Award -** Awards ranging in value up to the full cost of the student's International Program tuition are offered to students beginning their undergraduate studies at UBC in the International Program at UBC Vantage College. The awards will be granted on the basis of academic merit; financial need will also be taken into account. The award is non-renewable and is made on the recommendation of UBC Vantage College. (*First Award in the 2014W academic session*).

Kai-King CHOW and Cheng-Yok Chow Graduate Scholarship in Pharmaceutics – A \$1,000 scholarship has been endowed by Dr. Diana Shu-Lian Chow (PhD'81, Pharmaceutics) in honour of her parents, for doctoral students in Pharmaceutics who are in their second or later year of graduate study in the Faculty of Pharmaceutical Sciences. No student may receive this award more than once. The award is made on the recommendation of the Faculty of Pharmaceutical Sciences, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2014/2015 Winter Session)

**FACULTY of Arts Aboriginal Bursary** – Bursary funds totalling \$35,000 have been made available to support Aboriginal students in the Faculty of Arts in temporary financial need due to unforeseen circumstances that affect their ability to continue their studies. Bursaries are adjudicated by Enrolment Services in consultation with academic advisors for Aboriginal students within the Faculty of Arts Academic Advising Services. (First Award Available in the 2013/2014 Winter Session)



Edwina HELLER Memorial Award in Opera – Two awards of \$10,000 each are offered by the Paul and Edwina Heller Memorial Fund in memory of Edwina Heller to support outstanding singers enrolled in the Opera Division at the School of Music. Edwina Heller received her training as a pianist at the Warsaw Conservatory of Music, graduating with First Prize in 1937. She performed in concerts and on radio in Europe before emigrating to Canada, and here she performed in broadcasts on the CBC, as a soloist with the Vancouver Symphony Orchestra, and in recitals at UBC and elsewhere. She was a member of the UBC Piano faculty from 1960-64. Mrs. Heller and her husband, Mr. Paul Heller, were great supporters of the arts in Vancouver and particularly enjoyed attending opera performances. Awards are made on the recommendation of the Director of the Opera Program and, in case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2014/2015 Winter Session)

Paul HELLER Memorial Fellowship in Forestry – A \$15,000 fellowship is offered by the Paul and Edwina Heller Memorial Fund in memory of Paul Heller to a student enrolled in a thesis-based Master's or PhD program in the Faculty of Forestry. Originally from Warsaw, Poland, Paul Heller graduated as an engineer from Fitzwilliam College, University of Cambridge, England. He moved to Vancouver in the early 1940s, where he and his brother Sam Heller acquired and modernized the Pacific Pine Co. lumber mill in New Westminster. The business flourished in the postwar years, employing some 350 people at its peak. In addition to his work in forestry, Mr. Heller and his wife, Edwina Heller, were great supporters of music, contemporary Canadian art, and Vancouver's Jewish community. The fellowship may be given to the same recipient for a maximum of two years and is awarded on the recommendation of the Faculty of Forestry, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2014/2015 Winter Session)

Paul HELLER Memorial Fellowship in International Forestry – A \$15,000 fellowship is offered by the Paul and Edwina Heller Memorial Fund in memory of Paul Heller. Preference is given to a Master's student enrolled in an international exchange program in the Faculty of Forestry. If, in any given year, there are no eligible students undertaking an international exchange, the fellowship may be awarded to a thesis-based Master's or PhD student engaged in international field research or focusing their studies on international forestry issues. Originally from Warsaw, Poland, Paul Heller graduated as an engineer from Fitzwilliam College, University of Cambridge, England. He moved to Vancouver in the early 1940s, where he and his brother Sam Heller acquired and



modernized the Pacific Pine Co. lumber mill in New Westminster. The business flourished in the postwar years, employing some 350 people at its peak. In addition to his work in forestry, Mr. Heller and his wife, Edwina Heller, were great supporters of music, contemporary Canadian art, and Vancouver's Jewish community. The fellowship is awarded on the recommendation of the Faculty of Forestry, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2014/2015 Winter Session)

**INDIGENOUS Law Students' Association Award** – A \$1,000 award is offered by the Indigenous Law Students' Association to an Aboriginal student entering second or third year of the JD program in the Faculty of Law. Consideration will be given to students who demonstrate financial need, academic promise and a commitment to community service. Students must apply for this award. The award is made on the recommendation of the Faculty of Law. (First Award Available in the 2014/2015 Winter Session)

Alan JURISTOVSKI Memorial Award in Kinesiology – A \$1,200 award is offered by Cara Rurak (BHK'12) to a student entering his/her fourth year in Kinesiology and Health Science. The award is given in memory of Alan Juristovski, a man who touched the lives of so many with his fierce compassion, kindness and brilliance. Candidates must be in good academic standing and have a diverse set of volunteer experience. Preference will be given to students who wish to enter into a career in medicine. The award is made on the recommendation of the School of Kinesiology. (First Award Available in the 2014/2015 Winter Session)

MASTER of Food and Resource Economics (MFRE) Award – Awards ranging from \$1,000 to 70 percent of MFRE tuition fees are offered to students under the supervision of faculty in the Food and Resource Economics program in the Faculty of Land and Food Systems, with preference given to students registered in the MFRE program. Criteria for selection include academic merit, student financial need, and the recipient's contribution (or potential contribution) to the Food and Resource Economics program. The awards are made on the recommendation of the Faculty of Land and Food Systems, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2013/2014 Winter Session)

MCNISH Bursary in Physiotherapy – Two bursaries, each in the amount of \$350, have been endowed by the Estate of Hazel Cunliffe McNish for first year students enrolled in the Department of Physical Therapy. Mrs. McNish was one of the first graduates in



Physiotherapy at the University of Toronto and at one point was Chief of Physiotherapy at Shaughnessy Veterans Hospital. She also served as Chief of Physiotherapy at Nanaimo Regional General Hospital for several years. Mrs. McNish passed away in 2012. Adjudication is made by Enrolment Services. (First Award Available in the 2014/2015 Winter Session)

Leslie D PRITCHETT Memorial Scholarship – Scholarships totalling \$3,800 have been endowed through the Estate of Leslie D Pritchett for students in the Department of Materials Engineering in the Faculty of Applied Science. Mr. Pritchett graduated from UBC in 1950 with a degree in Metallurgical Engineering. He worked at Boeing for over 30 years and served as an advisor on all principal developments at Boeing in carbon fibre technology from the 1970's until his retirement. Mr. Pritchett was also part of the team that developed titanium structures for the proposed Super Sonic Transport that was developed for a time at Boeing. The awards are made on the recommendation of the Department of Materials Engineering and, in case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2014/2015 Winter Session)

Dal RICHARDS Award in Opera – A \$1,000 award has been made available through the Vancouver Foundation by Dal Richards, O.C., O.B.C. (DLitt'10) and Muriel Honey-Richards to a promising student studying opera in the Voice and Opera Division at the School of Music. A celebrated big band leader, Dr. Richards has made immeasurable contributions to the cultural life of British Columbia. His distinguished career in all aspects of the music business has spanned more than 80 years. He has been honoured many times for his music and for his commitment to a number of charitable organizations. The award celebrates Dr. Richards' and Ms. Honey-Richards' commitment to fostering the next generation of artistic talent. The award is made on the recommendation of the School of Music and, in case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2013/2014 Winter Session)

Brian TRUSCOTT Memorial Award in Journalism – A \$1,000 award is offered by family and friends in memory of Brian Truscott (BFA'88) to a student enrolled in the Graduate School of Journalism with an interest in business journalism. Brian began his career at the Vancouver Courier, where he worked as a reporter from 1988 to 1994. A move to Hong Kong saw him reporting for the Eastern Express newspaper, and then Finance Asia magazine. From 1998 to 2010, he was variously a columnist, reporter and



editor with the Dow Jones Newswires financial news service, in Singapore, London and Vancouver. Brian's friends and relatives remember him as an inquisitive man with a wry sense of humour and an abiding passion for his profession. The award is made by the School of Journalism, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First Award Available in the 2014/2015 Winter Session)

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

#648 Faculty Women's Club - Vancouver Centennial Scholarship – One or two scholarships totalling \$1,175 have been endowed by the Faculty Women's Club of the University of B.C., to commemorate Vancouver's Centennial in 1986. Preference is given to a woman who is studying on a part-time basis, in Winter Session, towards a first undergraduate degree. The award requires a special application which is available from Enrolment Services and the Women Students Office. The financial circumstances of the candidate may be a consideration. Applications must be submitted by June 30.

<u>How amended</u>: The Faculty Women's Club would like the maximum amount of scholarships to be 2.

#962 Ray Cole and Perkins + Will Entrance Scholarship in Architecture – A \$2,400 scholarship has been endowed by Peter Busby, Busby Perkins + Will and Dr. Ray Cole, Professor, University of British Columbia, for a student entering the Masters of Architecture program in the School of Architecture and Landscape Architecture. The student must have demonstrated through their past education, work experience or community activities a strong commitment to sustainable design principles and wish to expand on these through their studies in architecture at UBC. The award is made on the recommendation of the School of Architecture and Landscape Architecture, in consultation with the Faculty of Graduate Studies and Postdoctoral Studies.

**How amended**: Removed the name Busby from the award title as per donor's request.

#1017 Sean Gilbert – Crowe MacKay LLP Memorial Award – In honour of Sean Gilbert, BCom 1988, a Chartered Accountant at MacKay LLP for 25 years, a \$1,650 award has been endowed by family, friends and colleagues. The award is a tribute to Sean and recognizes his legacy of selflessness, mentorship, and commitment to excellence in professional practice and education. To be considered, candidates must be in either the third or fourth year of study in the accounting option of the Sauder School of Business with plans to pursue the Chartered Professional Accountant designation.



Students must exhibit strong academic standing, leadership amongst his or her peers, and proven athletic and/or artistic capabilities. The award is made on the recommendation of the Sauder School of Business.

**How amended**: Revised award title as per corporate name change; removed reference to the CA Education Foundation as per donor's wishes, and change in the name of the program.

#1190 Italian Government Book Prize – A book prize is offered by the Istituto Italiano di Cultura in Vancouver to an undergraduate student in Italian, of a level above beginners' (200 or higher), on the recommendation of the Head of the Department of French, Hispanic & Italian Studies.

How amended: Added the Italian course level to the criteria

#1196 Leslie F. S. Upton Memorial Prize – A \$275 prize is awarded as a memorial to Professor Leslie F. S. Upton. He left a lasting impression about Canada's past on hundreds of undergraduates and contributed significantly to the written history of North America while a member of the History Department from 1964 to 1980. The award endowed by contributions from Professor Upton's colleagues and friends at UBC and several other universities, former students and family. It is made to a third or fourth year student majoring in History, Medieval Studies or International Relations (with a history emphasis) who has written the best essay in a competitive examination organized and adjudicated by the History Department

<u>How amended</u>: Removed from last line reference to December 15 as the deadline for the organization and adjudication of the competitive examination.

#1443 International Community Achievement Awards – Awards of up to \$3,000 each are available to continuing international undergraduate students at The University of British Columbia, Vancouver Campus, who have demonstrated leadership in one or more of the following areas: community service, international engagement, intercultural understanding, promotion of diversity, intellectual pursuits, and artistic or athletic endeavours. Awards are made on the recommendation of a selection committee comprised of international student advisors from the Faculties, in consultation with International Student Development and the International Student Initiative.



**How amended**: Award amount has changed from \$2,000 to "up to \$3,000."

#1512 Harold A. JONES Memorial Scholarship – The Harold A. Jones Memorial Scholarship is donated by Seaspan ULC (an organization integrating Vancouver Tug Boat Co. Ltd. and Island Tug & Barge Limited, both pioneer companies in marine transportation on the B.C. coast) as a memorial to Harold A. Jones, who was President of Vancouver Tug Boat Co. Ltd. from 1924 to 1956. This scholarship serves not only to pay tribute to Mr. Jones' contribution to the company, but also to give recognition to his interest and participation, both public and personal, in all matters pertaining to coast-wise shipping. The scholarship for \$1,000 is to be awarded to an outstanding student entering the final year in the Bachelor of Commerce Program and majoring in the field of transportation in the Sauder School of Business.

**How amended:** Updated donor's and Faculty's name in the award description to reflect their current name.

#2728 KOOTENAY Bar Association Memorial Scholarship in Law – A \$1,000 scholarship is offered by the Kootenay Bar Association to a student in any year of study in the Juris Doctor (J.D.) Program of the Faculty of Law. While preference is to be given to students with ties to the Kootenays, such as graduation from a high school in the region, selection of a suitable recipient will remain at the discretion of the Faculty of Law.

<u>How amended</u>: Removed reference to honouring Association members who passed away in the description and revised wording regarding preference.

#3355 Erich Wagner Memorial Scholarship – A scholarship has been endowed in memory of Erich Wagner, a German violinist and music teacher, and his wife, Margarete, by their daughter. It is awarded to a student in violin performance on the recommendation of the School of Music and, in the case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies.

**<u>How amended</u>**: Description has been revised to include the name of the donor's mother.

#3705 Canadian Pharmacists Association Centennial Leadership Award – This award enables a third year student to join with pharmacists and fellow students in attending the annual conference of the Canadian Pharmacists Association. Selection of the recipient is based on student affiliation with the Canadian Pharmacists Association,



active promotion of the profession of pharmacy and the faculty and good academic standing.

**How amended**: Changed from membership to affiliation in the award criteria.

#4501 BC Association of Social Workers Prize – A \$250 prize and a one-year membership in the Association are offered by the British Columbia Association of Social Workers to an outstanding first year student in the School of Social Work, UBC Vancouver Campus. The award is made on the recommendation of the Director of the School.

**How amended**: Added one-year Association membership to the prize.

#5606 Roland W. Lauener Scholarship – A \$1075 scholarship has been endowed by friends, family and colleagues in memory of Roland W. Lauener. It is awarded to a fourth year student based on excellent communication skills and academic performance demonstrated in the third year internal medicine rotation. Dr. Lauener graduated from UBC's MD program in 1956, and specialized in internal medicine, with sub-specialties in endocrinology and nephrology. He returned to UBC as a professor in 1965 and proceeded to serve the university in many roles, including: Acting Head, Department of Medicine; Deputy Head, VGH Department of Medicine; Acting Head, Division of Internal Medicine; and Associate Dean, Undergraduate Medical Education (1973-1994), responsible for the MD undergraduate students and curriculum. Dr. Lauener was a passionate educator who received a number of teaching awards, including UBC's prestigious Killam Award in 1992. To Dr. Lauener, or "Rolly" as he was known to most of his colleagues, teaching was a priority and he made learning a pleasure. The award is made on the recommendation of the Faculty of Medicine.

**<u>How amended</u>**: Clarified that the award is to be made to a fourth year student and updated the biographical information, per the donor's wishes.

#6475 Ibn BATTUTA Award for Field Research – A \$3,000 travel award is offered to a graduate student in any field of study who wishes to conduct field research in the following Muslim-majority countries: Afghanistan, Algeria, Comoros, Iraq, Iran, Jordan, Libya, Maldives, Mauritania, Morocco, Palestine, Pakistan, Saudi Arabia, Somalia, Syria, Tajikistan, Tunisia, Turkey, Xinjiang (Western China) and Yemen. To be considered, graduate students must have a minimum overall GPA of 80% in their last two years of



study. Candidates should also have completed at least one course in field research methods, or be able to demonstrate equivalent knowledge. Award is made on the recommendation of the Faculty of Graduate Studies.

**How amended**: Updated name of Palestine in the award description.

#7954 Dr. H. R. MacCarthy Bursary in Plant Science – One or more bursaries totalling \$6,675 have been endowed for needy undergraduate or graduate students who have made good academic progress in studies or research in Plant Science. Adjudication is made by Enrolment Sevices.

<u>How amended</u>: Removed reference to the Department of Plant Science as it does not exist anymore; added last line to update description in compliance with current award adjudication process.

From: Dr Stanley B Knight : Convocation Senator

Re. Motion: To form a Senate Standing Committee for Athletics and Recreation.

Whereas Athletics and Recreation have been an integral part of university life for 99 years and the University Act entrusts Senate Committees, their responsibilities and the authority to establish committees to the Senate:

and the university endorses Athletics and Recreation programs involving the participation of thousands of students and staff in multi-million dollar programs in facilities valued at hundreds of million dollars:

and the Athletic and Recreation program's scope ranges from the campus, to the greater Vancouver region, to Provincial, National and International levels;

and the Senate provides a historical record and forum for discussion and decision making related to all university programs and policy;

it is recommended that the following motion be presented to the May 14, 2014 Senate meeting.

"The Senate form a Standing Committee for Athletics and Recreation for inclusion in the formal business of the new Senate Triennium (2014 – 2017)."