

# THE UNIVERSITY OF BRITISH COLUMBIA



## Vancouver Senate Secretariat

Enrolment Services  
Senate and Curriculum Services  
2016-1874 East Mall  
Vancouver, BC V6T 1Z1  
[www.senate.ubc.ca](http://www.senate.ubc.ca)

## Vancouver Senate

### AGENDA

#### THE EIGHTH REGULAR MEETING OF THE VANCOUVER SENATE

**WEDNESDAY, APRIL 15, 2009**

**7:00 P.M.**

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

1. **Senate Membership -- Mr. Brian J. Silzer**  
New Member: Rev. Dr. Stephen Farris, representative of the Vancouver School of Theology
2. **Minutes of the Meeting of March 25, 2009 -- Prof. Stephen J. Toope**  
(approval) (circulated)
3. **Business Arising from the Minutes**
4. **Remarks from the Chair and Related Questions -- Prof. Stephen J. Toope**
5. **From the Board of Governors -- Prof. Stephen J. Toope**  
Confirmation that the following items approved by the Vancouver Senate were subsequently approved by the Board of Governors as required under the *University Act* (information)

#### **Senate Meeting of January 21, 2009**

Curriculum Proposals from the Faculties of Applied Science and Arts.  
New Awards.

#### **Senate Meeting of February 25, 2009**

Curriculum Proposals from Faculties of Applied Science (School of Nursing), Arts, Education (School of Human Kinetics), Graduate Studies (Applied Science, Arts, College for Interdisciplinary Studies, and Medicine), and Land & Food Systems.

The establishment of the Julia Levy BC Leadership Chair in Macular Research in the Faculty of Medicine.

Change to the Regulations Governing University Awards.

Four Year Fellowships for PhD Students.

New Awards.

6. **Admissions Committee -- Dr. David W. Fielding**  
Review of Admissions Policies (approval) (circulated)

.../continued

7. **Curriculum Committee -- Dr. Peter Marshall**  
Curriculum Proposals from the Faculties of Applied Science, Graduate Studies (College for Interdisciplinary Studies, Land & Food Systems, and Science), and Science (approval) (circulated)
8. **Place and Promise: The UBC Plan -- Provost David Farrar**  
(information) (circulated)
9. **Proposed Agenda Items**
10. **Other Business**

Section 16 (b) of the *Rules and Procedures of Senate* states that meetings will adjourn no later than 9:30 p.m.

Regrets: Lauren Hume, telephone 604.822.5239 or e-mail: [lauren.hume@ubc.ca](mailto:lauren.hume@ubc.ca)

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

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## Vancouver Senate

### MINUTES OF MARCH 25, 2009

#### Attendance

**Present:** Prof. S. J. Toope (Chair), Ms. L. M. Collins (Acting Secretary), Dean T. Abounasr, Dr. R. Anstee, Dr. K. Baimbridge, Dr. J. Brander, Principal M. Burgess, Dr. B. Cairns, Mr. G. Costeloe, Mr. D. Dance, Dr. J. Dennison, Mr. G. Dew, Ms. A. Dulay, Dr. W. Dunford, Dr. D. Farrar (Provost), Dr. S. Farris, Dr. D. Fielding, Ms. M. Friesen, Dean N. Gallini, Mr. C. Gorman, Dr. S. Grayston, Dr. W. Hall, Dr. P. G. Harrison, Mr. S. Heisler, Ms. D. Herbert, Dr. A. Ivanov, Dr. B. S. Lalli, Dr. D. Lehman, Mr. D. Leung, Dr. P. Loewen, Mr. A. Loughheed, Mr. B. MacDougall, Dr. P. L. Marshall, Dr. W. McKee, Mr. R. McLean, Mr. W. McNulty, Mr. C. Meyers, Ms. S. Morgan-Silvester (Chancellor), Principal L. Nasmith, Dr. G. Öberg, Dr. C. Orvig, Dr. K. Patterson, Dean S. Peacock, Dr. J. Plessis, Dr. A. Riseman, Dr. T. Ross, Dr. L. Rucker, Dean C. Shuler, Ms. L. Silvester, Dr. S. Singh, Dr. B. Stelck, Dean G. Stuart, Dr. S. Thorne, Dean R. Tierney, Dr. M. Upadhyaya, Mr. D. Verma, Dr. M. Vessey, Mr. B. Wang, Mr. A. Wazeer, Dr. R. Windsor-Liscombe, Dr. R. Yaworsky, Dr. T. Young.

**By invitation:** Ms. M. Aucoin, Dr. A. Kindler, Dr. G. Poole, Mr. W. Sudmant, Mr. H. Wallace.

**Regrets:** Mr. B. J. Silzer (Secretary), Dr. Y. Altintas, Ms. K. Aminoltejari, Dean M. A. Bobinski, Ms. H. Boyd, Dr. B. Craig, Dean B. Evans, Mr. B. Frederick, Mr. R. Gardiner, Dr. R. Irwin, Dr. S. B. Knight, Ms. H. Lam, Mr. A. Mohan, Dean D. Muzyka, Dr. B. Osmond, Ms. A. Peterson, Mr. G. Podersky-Cannon, Dean J. Saddler, Ms. A. Shaikh, Dean R. Sindelar, Dr. R. Sparks, Mr. A. Warbinek, Dr. P. Ward, Dr. R. Wilson, Ms. M. Young.

**Recording Secretary:** Ms. L. M. Collins

#### Call to Order

The President called to order the seventh regular meeting of the Vancouver Senate for the 2008/2009 Academic Year.

## Minutes of the Previous Meeting

<i>Dr. Windsor- Liscombe Dr. Anstee</i>	}	<i>That the minutes of the meeting of February 25, 2009 be adopted as circulated.</i>
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## DISCUSSION

There were numerous corrections to the attendance section forwarded to the Recording Secretary. Senators were reminded to sign the attendance sheet.

The corrected  
minutes were  
adopted by  
consent.

## Remarks from the Chair and Related Questions

### INTERCAMPUS RELATIONSHIPS

The President reported that the UBC executive had recently received a report from a task force to examine the relationship between the two UBC campuses. Task force membership had included the Deputy Vice-Chancellor, the Provost & Vice-President, Academic, the Associate Vice-President, Human Resources, and the Vice-President, Students. The group had recommended making a distinction between units or people acting on behalf of a particular campus as compared to acting on behalf of the UBC system. Some reporting relationships also needed to be clarified. The President described this discussion as very productive.

### ABORIGINAL STRATEGIC PLAN IMPLEMENTATION

The President drew attention to the Aboriginal Strategic Plan (available through the UBC Aboriginal portal at <http://aboriginal.ubc.ca>). A working draft of the Plan had been posted on the website in October 2008. A revised version had been submitted to President Toope in January 2009, and implementation had already begun.

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*Remarks from the Chair & Related Questions, continued*

The following had been identified as immediate priorities for the UBC system:

- Communications strategy;
- Recruitment of Aboriginal graduate students;
- Financial support for Aboriginal students in undergraduate and professional programs; and
- Faculty recruitment and support (for Indigenous faculty and those conducting work in Indigenous research areas).

Additional priorities had been identified for each of the two campuses.

## SUSTAINABILITY PLAN

The President described activity underway toward developing a sustainability plan to be completed by September 2009. Dr. John Robinson had been named chair of a University-wide committee to consider sustainability issues from an academic perspective. Ms. Charlene Easton and Dr. Peter Dauvergne had been named as Vice-Chairs. The sustainability strategy would consider in part the UBC Farm and the south campus. Once completed, the new Centre for Interactive Sustainability (CIRS) was expected to be one of the greenest buildings in the world. Prof. Toope noted that a separate committee had been charged with operational issues related to sustainability.

Prof. Toope stated that the sustainability plan was one of several plans that would inform the development of the strategic plan that would ultimately replace *Trek 2010*. Parts of the larger strategic plan would come to Senate for discussion in the near future.

## CERTIFICATES OF APPRECIATION

On behalf of Senate, Prof. Toope presented certificates of appreciation to Student Senators completing their electoral terms on March 31, 2009. Senators applauded.

## **UBC 2010 Olympic and Paralympic Games Update**

Dr. Farrar introduced guest speaker Ms. Michelle Aucoin, Director, UBC 2010 Olympic and Paralympic Games. The assembly recognized Ms. Aucoin. The Recording Secretary confirmed that copies of the PowerPoint presentation would be available upon request from the Senate secretariat.

Ms. Aucoin stated that, as the 2010 Winter Olympic and Paralympic Games approached, the extent of opportunities and impacts was becoming clearer. She gave an overview of information available to date, noting that she hoped to return to Senate to give an update in the fall of 2009. Presentation highlights included the following:

- The UBC 2010 Olympic and Paralympic Games Secretariat reported to the Vice-President, External, Legal, and Community Relations and was responsible for (among other things) integrating and activating collaboration for campus-wide initiatives; and identifying and creating opportunities for students, staff, faculty and alumni to engage in the Olympics and Paralympics.
- Two key venues would be the UBC Thunderbird Arena at the Point Grey campus as the venue for women's ice hockey and men's ice sledge hockey and an international media centre at Robson Square.
- The impact at UBC would be felt for much longer than the period of the Games themselves. Parts of the University would be affected for all of Term 2 of the 2009/2010 Winter Session, with security ranging from limited to high throughout the period.
- Most Faculties -- Medicine and Dentistry were exceptions -- would observe a two-week midterm break in February 2010.
- Anticipated campus impacts included increased occupancy in student residences, increased demand for food and other services, protests, increased security, and increased media presence.
- Anticipated impacts at the UBC Thunderbird Arena concerned parking, road closures, directional changes and rerouting, and other issues related to the presence of a security perimeter.
- Emerging priority issues concerned security, accessibility, and transit.
- Additional travel time would be necessary during the Games. The public was being advised to leave cars at home and to rely on transit during the Games. Additional transit service would be made available.

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*UBC 2010 Olympic and Paralympic Games Update, continued*

- UBC Career Services had agreed to consolidate volunteer and employment opportunities for students and alumni.
- One of several significant learning opportunities was the Olympic Games Impact Assessment, a seven-year project.

## DISCUSSION

In response to a question from Mr. Dance about the impact on students in the Faculties of Medicine and Dentistry, Ms. Aucoin stated that traveling around the city would constitute a challenge for both students and faculty. Medicine planned to videorecord some of the present year's classes in the event that they would need to be used during the Olympic year.

Mr. Wazeer stated that he lived in the fraternity village, and that fraternity members from across North America would likely visit during the Games period. He asked about security restrictions, given the proximity of the fraternities to the arena. Ms. Aucoin was hopeful that area residents would not notice extreme changes as they went about their daily business. She expected that the focus of security activity would be in and around the venue itself rather than on residents. The UBC RCMP detachment was responsible for public safety outside the Olympic security perimeter as as many as 7,000 spectators entered and exited the arena for each event. Prof. Toope noted that UBC would be given very little opportunity to influence security rules.

Mr. Costeloe asked whether student groups had been consulted about UBC planning for the Games. Ms. Aucoin replied that she understood that the Alma Mater Society had not felt adequately consulted. Some very valuable conversations had since taken place, and the University had committed to ongoing consultation.

In response to a question from Ms. Silvester, Ms. Aucoin noted that large segments of the student community were very excited about opportunities for engagement during the

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*UBC 2010 Olympic and Paralympic Games Update, continued*

games. She cited as an example a recent email message from a high school student in Winnipeg who planned to visit Vancouver during the Games and was looking for opportunities to be involved.

In response to a question from Mr. Lougheed, Ms. Aucoin reported that Housing and Conferences had decided that subletting of residence rooms would not be permitted. While Housing had agreed to use a generous interpretation of what constituted a “guest”, residents themselves would also need to be present and responsible.

Dr. Hall stated that she would be engaged in ongoing research projects at the time of the Games, and that links between UBC researchers and the community were critical for project success. She asked how best to plan ahead in order to assure deliverables during the Games period. Ms. Aucoin cited the Travel Smart Know Before You Go program as one possible resource and also offered a subsequent conversation with Dr. Hall about specific project needs.

Mr. McLean asked about strategies for communication with students, suggesting that broadcast email messages would have limited effect. Ms. Aucoin stated that the communications team was considering broad based strategies that could include email, Facebook, and Twitter in an effort to be accessible to students. She asked Student Senators to offer their advice about how to best communicate with students.

Referring to the expectation for increased occupancy in residences, Mr. Dew asked about legal, health, and safety issues. Ms. Aucoin agreed that all of these issues would need to be discussed, both for the residences and on campus generally. Visitors to campus would seek access to food services and washrooms, as well as telephones and computers.

Ms. Aucoin invited Senators to forward any additional questions for response at a later date.



## **Admissions Committee**

Committee member Dr. Harrison presented the reports.

### **ENGLISH LANGUAGE ADMISSION STANDARD**

The Committee had circulated a proposal to modify the English Language Admission Standard in two ways:

1. To stop accepting the computer-based version of the TOEFL test because this test had not been available since 2006; and
2. To raise the minimum internet-based TOEFL score by one point for each of the component areas in reading, writing, listening and speaking, and from a minimum composite score of 86 to 90.

*Dr. Fielding  
Dr. Rucker*

}

*That Senate approve the revised calendar entry on the English Language Admission Standard for undergraduate admission, effective for entry to the 2010 Winter Session and thereafter.*

### **DISCUSSION**

In response to a question from Mr. Wazeer, Dr. Harrison reported that although the Admissions Committee might look at Language Proficiency Index requirements in future, it had not done so to date. He noted that the current proposal had originated with one of five working groups established within the Admissions Committee. Additional proposals were expected as each of the groups completed its work.

The motion was  
put and carried.

### **ENROLMENT TARGETS 2009/2010**

The Committee recommended to Senate for approval undergraduate enrolment targets for the 2009/2010 academic year for each Faculty, division and year level. The material circulated showed targets for new and continuing students as both head counts and full-

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*Admissions Committee, continued*

time equivalents (FTEs), together with comparative actual and target numbers from the previous year.

The proposed enrolment targets had been reviewed by the Provost & Vice-President Academic and the Committee of Deans.

<i>Dr. Harrison</i>	}	<i>That Senate approve the 2009/2010 enrolment targets, as per section 27(2)(r) of the University Act.</i>
<i>Dr. Fielding</i>		

## **DISCUSSION**

The assembly recognized Mr. Walter Sudmant, Director, Office of Planning and Institutional Research, to answer a question from Dr. Loewen about an incongruence between UBC Vancouver's internal targets and provincial government targets. Mr. Sudmant explained that over the previous two decades, UBC graduate enrolments had been allowed to grow without commensurate increases in provincial funding. The University had managed this by reallocating undesignated undergraduate growth as graduate growth, even though graduate student spaces were far more expensive. The President added that, while the University had received some new funded graduate spaces, the shortfall had not yet been recovered. Dr. Brander reminded Senators that the strategy to intentionally over enroll with respect to graduate students had been approved by the Senate.

The motion was  
put and carried.

## **Agenda Committee**

Committee member Dr. Nasmith presented the report.

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*Agenda Committee, continued*

## CALL FOR SUBMISSIONS: ISSUES OF BROAD ACADEMIC INTEREST

The following is an excerpt from the report for information circulated by the Agenda Committee.

The Agenda Committee of the Vancouver Senate hereby issues a call for submissions of items of broad academic interest for possible inclusion on a future Senate meeting agenda.

Why do we do this? The following recommendation of the ad hoc Committee to Review Senate was accepted by the Senate on November 16, 2005:

That at least one Senate meeting per year include a thorough consideration of selected broad academic issues, that the Agenda Committee canvas the University community for appropriate topics, that once a topic is selected, the Agenda Committee has a position paper prepared so that the discussion is centred and productive. The Agenda Committee should allocate one or two members of Senate the task of leading the discussion pertaining to the designated subject. The whole University community should be invited to attend these meetings.

Once the topics have been collected and prepared, the Agenda Committee will include one or two such topics on Senate meeting agendas where space is available over the following year.

This call will also be circulated to Vice-Presidents, Associate Vice-Presidents, Deans, Associate Deans, and other selected academic administrators with the request that they circulate further as they deem appropriate. It would be appreciated if Senators would also promote this opportunity within your units.

Please forward submissions to Ms. Lisa Collins, Associate Registrar, Senate & Curriculum Services, (Lisa.Collins@ubc.ca) no later than Friday, April 10, 2009. Submissions may be up to 300 words (approximately one page) in length and should include commentary about why the academic community would find the topic worthy of discussion.

The Agenda Committee will deliver a progress report to Senate at its May 2009 meeting.

## DISCUSSION

There was some discussion about the Review Committee's recommendation that the entire University community be invited to attend meetings where these items were to be discussed. Ms. Collins noted that many items of interest could be discussed during the public portion of a regular meeting rather than at a single special meeting.

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*Agenda Committee, continued*

It was agreed that, although the Review Committee had suggested setting aside one meeting each year, the Agenda Committee would recontour Senate discussions at regular meetings by adding items to otherwise light meeting agendas.

### **Curriculum Committee**

Committee Chair Dr. Marshall presented the report.

*See also 'Appendix A: Curriculum Summary.'*

<i>Dr. Marshall</i>	}	<i>That the new and changed courses, programs and degree parchments brought forward by the Faculties of Applied Science, Forestry, Graduate Studies (Pharmaceutical Sciences and Science), and Pharmaceutical Sciences be approved.</i>
<i>Mr. Heisler</i>		

Carried.

Dr. Marshall reported that the Committee was considering how it might modify its regular reports to Senate to make them more interesting to Senators. The President noted that the brief motions before the Senate each month represented a great deal of work by the Committee and the Faculties and Schools.

### **Student Awards Committee**

Committee Chair Dr. Stelck presented the report.

#### **NEW AWARDS**

*See also 'Appendix B: New Awards.'*

<i>Dr. Stelck</i>	}	<i>That the awards be accepted as listed and forwarded to the Board of Governors for approval; and that letters of thanks be sent to the donors.</i>
<i>Principal Nasmith</i>		

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*Student Awards Committee, continued*

### **AMENDMENT**

Dr. Stelck noted that it was necessary to amend the description for the R. Grant INGRAM Memorial Scholarship in Oceanography to account for the fact that UBC offers an honours program (but not a major) in oceanography. The following amendment was accepted by unanimous consent:

**Circulated version:** "...enrolled in the Oceanography major."

**Amended to read:** "...undertaking studies in oceanography."

The motion to approve the new awards (as amended) was put and carried.

### **Teaching & Learning Committee**

Committee Chair Ms. Friesen presented the report. At Ms. Friesen's request, the assembly recognized Committee members Dr. Gary Poole and Dr. Anna Kindler.

Ms. Friesen spoke briefly about the background of the proposal, suggesting that the policy supported interdisciplinarity by encouraging students to try out less familiar subject areas as part of their coursework toward a degree. Students would be permitted to select the Credit/D/Fail (Cr/D/F) grade type for up to 12 credits of elective coursework over the course of a direct-entry undergraduate degree. Students would be permitted to select Cr/D/F for up to six credits in any one session. If approved, the policy stipulated that a review take place two years after implementation. The policy was proposed for implementation by the 2010 Winter Session, i.e., June 2010 registration for courses beginning in September 2010.

Ms. Friesen  
Mr. Costeloe

}

*That the proposed Policy on Credit/D/Fail Standing be approved as set out in the attached document entitled "Policy on Credit/D/Fail Standing".*

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*Teaching & Learning Committee, continued*

## **DISCUSSION**

Mr. Dew asked why the Committee proposed making this grade type available to undergraduate students but not graduate students. Dr. Kindler confirmed that, although the current policy would only apply to direct-entry undergraduate programs, the Committee could develop an analogous policy for graduate students and submit it for Senate approval at a later date. There was agreement that Question 4 in the FAQs should be reworded for clarification.

## **AMENDMENTS BY CONSENT**

1. The second sentence in Item 4 in the policy was amended to add the following phrase (in bold): “The deadline to opt **in or out of** ~~for~~ Credit/D/Fail standing...”
2. The first line in Item 6 in the policy was amended such that the first appearance of the word “students” was modified to appear in the possessive, rather than in the plural.
3. Item 10 in the policy was amended to read, “Tuition fees would be unaffected by the grading option chosen.”

## **DISCUSSION ON MAIN MOTION, CONTINUED**

Dr. Dunford suggested that the University should allow students to sit in on courses without being assessed tuition fees or granted credit. There was some discussion about options for students to audit courses under existing policies and the related restrictions. Dr. Harrison noted that course loads in some programs were too heavy to support very much auditing of courses. Ms. Friesen pointed out that students wishing to audit a course would require permission of the instructor.

In response to question, Dr. Kindler stated that students opting for Cr/D/F grading would need to meet course pre- and co-requisites in the same way as other students.

Dr. Dunford noted that, while the policy specified that the University would not notify the instructor that a student had opted for C/D/F grading, students themselves might tell their instructors. He suggested that language prohibiting such disclosure be added to the policy.

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*Teaching & Learning Committee, continued*

Dr. Harrison asked about provisions for oversight of programs opting in or out of Cr/D/F grading. He suggested that some criteria be made explicit. Ms. Friesen was hopeful that most direct-entry programs would opt in, but acknowledged that programs could opt out if they wished. Dr. Kindler noted that some professional programs had requirements that might make Cr/D/F grading impossible for their students, and that the Committee thought that this decision was best left up to Faculties themselves. Dr. Harrison stated that the policy, despite careful effort and many revisions, remained unclear about exactly what constituted an elective course. He noted that in some programs, very few courses would qualify as electives under the policy, meaning that students would have fewer choices than it would first appear.

Mr. Wazeer stated that the AMS Council was in support of the policy, but that the Senate Student Caucus hoped that the policy could have been made effective for courses beginning in September 2009 as opposed to 2010. He noted that the Committee had received a submission from Enrolment Services that seemed to indicate that implementation of this new Senate policy would need to wait in queue with other systems development projects. He suggested that implementation of a Senate policy should be top priority for Enrolment Services.

The assembly recognized Mr. Hugh Wallace, Director of Student Systems, Enrolment Services. Mr. Wallace reported that implementation of the policy would require modification of 13 separate modules of the Student Information System. If Enrolment Services were to begin implementation efforts immediately following approval, it would be impossible to ensure that the new feature would have been tested sufficiently to assure a smooth release in September 2009. Mr. Wallace stated that, given the amount of work to be done, it would constitute a challenge to have the Cr/D/F grade type in place for the 2010 Winter Session. Ms. Collins confirmed that the implementation of Senate decisions was a top pri-

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*Teaching & Learning Committee, continued*

ority for Enrolment Services and that many of the projects already in the development queue had resulted from Senate and Faculty decisions. She added that effective dates set by Senate were taken very seriously by Enrolment Services, and that it was therefore better to express concern prior to approval rather than let a Senate-imposed deadline pass unmet.

Mr. Costeloe described his own experience as a biology/humanities student when he enrolled in a physics course in relativity and quanta. He had barely passed the course, but had appreciated the once-in-a-lifetime opportunity to explore outside the normal bounds of his program. He stated that students already had some opportunity to explore under current policies, but that many students made safe course choices that would boost their grade averages. He acknowledged that the proposed policy was not perfect, but expressed his support for the policy as a large step forward. Mr. Costeloe expressed pride in UBC's continual innovation, citing creative thinking around sustainability and student evaluations of teaching as two student-led examples.

In response to a question from Mr. Wang, Ms. Friesen confirmed that the policy would be reviewed two years following its implementation and that the University could judge the policy's relative success at that time.

There was some discussion about which programs would be eligible under the policy as written. Dr. Hall stated that this option would not be open to students in the Bachelor of Science in Nursing because there were no elective courses in the program. Dr. Fielding indicated that Bachelor of Science in Pharmacy students might wish to participate. Mr. Eaton explained that although the current policy was not applicable to Pharmacy students, the Faculty could consider adjusting its academic regulations to add Cr/D/F grading as an option.



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*Teaching & Learning Committee, continued*

Mr. Lougheed asked about the maximum number of credits allowed to be taken on a Cr/D/F basis over the course of an undergraduate degree program. While 12 credits represented four three-credit courses or 10 percent of a 120-credit degree program, some programs had higher credit loads and many courses in the Faculty of Science were worth four credits.

**MOTION TO AMEND**

<i>Mr. Lougheed</i>	}	<i>That the credit maximum listed in Item 1 of the proposed policy be amended from 12 to 14.</i>
<i>Mr. McLean</i>		

**Discussion**

Dr. Harrison drew attention to the fact that this change would mean that some students would be permitted take five courses on a Cr/D/F basis rather than four because there were many one- and two-credit courses at the University.

Dr. Kindler stated that it was intended that the maximum be set at approximately ten percent of a typical undergraduate degree program. The Committee was aware that some programs required more than 120 credits.

The motion to amend was put and failed.

**DISCUSSION ON MAIN MOTION, CONTINUED**

Student Awards Committee Chair Dr. Stelck asked about ramifications for average calculation for student awards. He pointed out that awards averages were currently based on 27 credits. Eligibility for awards would increase if awards were to be calculated on the basis of 21 credits for some students. Mr. Eaton stated that the Committee had considered the possibility that grade averages would increase slightly, but added that the full effect would not be known for several years following implementation. There was agreement

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*Teaching & Learning Committee, continued*

that the impact of the new policy on awards eligibility should be identified as an issue to be considered when the policy was reviewed.

Dr. Anstee requested further rationale for the “D” being included in the grade type, and expressed the opinion that a “D” seemed punitive to students. Ms. Friesen replied that the Committee had considered pass/fail instead of Cr/D/F, but had been convinced by student input that students would work harder and would appreciate the opportunity to distinguish themselves from those who had only marginally passed. Dr. Kindler stated that, with the D in place, a grade of Credit was stronger evidence of student success in a course. There was some discussion about whether the University should eventually consider broadening the percentage range for a grade of D.

**MOTION TO AMEND**

<i>Dr. Anstee</i>	}	<i>The the proposed policy be amended to remove the “D” from Credit/D/Fail.</i>
<i>Dr. Cairns</i>		

**Discussion**

In response to a question from Dr. Rucker, Ms. Collins stated that the back of the student transcript would define grade types and ranges however they might be set by Senate.

Dr. Vessey suggested that retaining the D might provide faculty with some reassurance that students were not enrolling in their courses as an easy way out.

The motion to  
amend was put  
and failed.

**DISCUSSION ON MAIN MOTION, CONTINUED**

There was discussion about what would happen when a student transferred programs. Dr. Anstee pointed out that students in the Faculty of Science were not permitted to repeat courses for higher standing. He envisioned a scenario where the proposed policy might

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*Teaching & Learning Committee, continued*

appear to force a Faculty to permit a student to repeat a course under a different grade type. Dr. Kindler stated that students seeking to transfer from one program to another would likely be motivated to reveal their percentage grades in order to qualify for transfer. She added that some receiving programs might also choose to accept a Cr/D/F grade to meet a program requirement.

Dr. Harrison pointed out that it was customary for instructors in some courses to post percentage grades on Web CT Vista, and that some students would unavoidably see their percentage grades this way.

**SUBSIDIARY MOTION BY CONSENT**

At the suggestion of Dr. Yaworsky, the assembly accepted the following motion by consent:

That the Teaching & Learning Committee, in consultation with the Academic Policy Committee and the Curriculum Committee, present a report to Senate in October 2012 on the implementation of the Policy on Credit/D/Fail Standing, including student uptake, number of eligible courses as designated by the Faculties and Schools, effects on awards and averages, any other implications that should be brought to Senate's attention, and any necessary recommendations for changes.

**VOTE ON MAIN MOTION**

The main motion  
was put and  
carried.

**Adjournment**

There being no further business, the meeting was adjourned. The following regular meeting of the Senate was scheduled for Wednesday, April 15, 2009.

## **APPENDIX A: CURRICULUM SUMMARY**

### **Faculty of Applied Science**

Degree parchment change

### **Faculty of Forestry**

#### **NEW COURSE**

FRST 432 (3)

Degree parchment change

### **Faculty of Graduate Studies**

#### **PHARMACEUTICAL SCIENCES**

#### **PROGRAM CHANGE**

Doctor of Pharmacy > Changes to first-year course list

#### **NEW COURSE**

PHAR 506 (6)

#### **SCIENCE**

#### **COURSE CHANGES**

BOTA 549 (18)

ZOOL 549 (18)

#### **NEW COURSE**

EOSC 515 (1)

### **Pharmaceutical Sciences**

#### **NEW COURSE**

PHAR 456 (3)

## **APPENDIX B: NEW AWARDS**

**DELCAN Corporation Graduate Bursary:** Two bursaries of \$1,000 each are offered by Delcan Corporation in memory of the contribution made by Mr. Joe Cunliffe, O.C. to engineering in British Columbia. The bursaries are awarded to graduate students in civil engineering with demonstrated need for financial assistance. (First awards available for the 2009/10 Winter Session)

**DELCAN Corporation Undergraduate Bursary:** Two bursaries of \$1,000 each are offered by Delcan Corporation in memory of the contribution made by Mr. Joe Cunliffe, O.C. to engineering in British Columbia. The bursaries are awarded to undergraduate students in civil engineering with demonstrated need for financial assistance. (First awards available for the 2009/10 Winter Session)

**Kenneth and Keith William HALEY Memorial Bursary in Forestry:** Two bursaries of \$500 each are offered in memory of Kenneth Haley and his son, Keith William Haley (B.S.F. 1979). Kenneth Haley dedicated his life to protecting B.C. forests as a Forest Ranger and fought many large fires in the Alberni Ranger District, including the Tay River Fire. Keith William Haley pursued his short career in the forestry sector until his untimely death in a tragic car accident as a result of icy road conditions. These two bursaries honour Ken and Keith's unwavering commitment to Forestry and are awarded to students with demonstrated financial need who are pursuing a degree in Forestry. (First awards available for the 2009/10 Winter Session)

**HB LANARC Sustainability Award in Landscape Architecture:** A \$1,000 award is offered by HB Lanarc to a student entering the second or third year in the Landscape Architecture Program. Preference is given to a student who has demonstrated outstanding design creativity and commitment to addressing sustainability, community well-being and resilience issues such as climate change, water management, ecosystem biodiversity, sustainable food systems, resource management and other related issues. The award is made on the recommendation of the Landscape Architecture Program, School of Architecture and Landscape Architecture in consultation with the Faculty of Graduate Studies.

**Jerry HEDDINGER Leadership Award in Food Science:** A \$700 award has been endowed by Jerry Hedding for a third or fourth year student in Food Science who demonstrates outstanding student leadership in class, campus life or community. The award is made on the recommendation of the Department of Food, Nutrition and Health in the Faculty of Land and Food Systems. (First award available for the 2009/10 Winter Session)

**Werner and Hildegard HESSE Fellowship in Ornithology:** Fellowships totaling \$10,000 have been endowed through a bequest by Werner Hans Hermann Hesse for graduate students engaged in ornithological research projects. The awards are made on the recommendation of the Department of Zoology in consultation with the Faculty of Graduate Studies. (First award available for the 2009/10 Winter Session)

**R. Grant INGRAM Memorial Scholarship in Oceanography:** A \$1,000 scholarship has

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*Appendix B: New Awards, continued*

been endowed by the family, friends and colleagues of Grant Ingram, an internationally renowned Arctic oceanographer, UBC professor and administrator, who shared his passion and enthusiasm for the study of oceans with many aspiring students and scientists. Grant was a distinguished scholar widely recognized for his achievements in Arctic oceanography, and his dedication to students and great sense of adventure were an inspiration to all. The scholarship is granted to a top undergraduate or graduate student undertaking studies in oceanography. The award is made on the recommendation of the Department of Earth and Ocean Sciences and, in the case of a graduate student, in consultation with the Faculty of Graduate Studies. (First award available for the 2009/10 Winter Session)

Reginald PALLISER-WILSON Scholarship: Scholarships totaling \$3,400 have been endowed through a bequest by Joy Gertrude Palmer Helders for students majoring or honouring in Mathematics. The awards are made on the recommendation of the Department of Mathematics. (First awards available for the 2009/10 Winter Session)

Previously-Approved Awards With Changes in Terms or Funding Source:

None

# THE UNIVERSITY OF BRITISH COLUMBIA



Vancouver Senate Admissions Committee  
c/o  
Enrolment Services | Senate & Curriculum Services  
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March 30, 2009

**To: Vancouver Senate**  
**From: Admissions Committee**  
**Re: Review of UBC Undergraduate Admission Policies: Status Report & Motion to Extend Reporting Deadline (approval)**

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**Motion 1:** *That the report of the Admissions Committee on “Review of UBC Undergraduate Admission Policies: Status Report” be received.*

**Motion 2:** *That the Senate Admissions Committee be permitted to report back at the December 2009 meeting of Senate in lieu of the April 2009 meeting specified by Senate.*

At the May 2008 meeting of the Vancouver Senate, the Admissions Committee was directed to undertake a review of UBC’s undergraduate admission policies with a view to determining their efficacy in meeting goals of Trek 2010 and the UBC Academic Plan and report back to the Senate no later than December 2008 with recommendations for any necessary changes. The membership of the Admissions Committee for the 2008-2011 Senate electoral term was approved in September 2008. Given the new membership of the Committee and the scope of the review referred to it by Senate, an extension was granted at the December 2008 meeting of Senate with a revised report back deadline of April 2009. The Committee’s review of admission policies is ongoing and the progress report presented herein outlines the Committee’s activities to date in meeting its mandate. A final report will be presented to Senate in December 2009.

Prior to undertaking a detailed review of undergraduate admission policies, the Committee first identified relevant policies for examination in light of Senate approved Principles of Effective Undergraduate Admission to UBC (appendix 1). The policies were then prioritized and assigned to several working groups that were constituted to meet the Committee’s mandate with representation from the Committee, Enrolment Services, the International Student Initiative, the Office of Planning and Institutional Research, and with consultation with representatives of UBC Okanagan where appropriate. The working groups were directed to undertake a detailed analysis of assigned policies and make any necessary recommendations for change. Five broad issues were identified by the Committee and assigned for review by working groups as follows:

1. Working Group 1 – Review of the English Language Admission Standard
2. Working Group 2 – Level and Subject Matter of Secondary School Courses Used for Admission to UBC Vancouver

3. Working Group 3 – Implications of Optional Provincial Examinations and Comparative Standards
4. Working Group 4 – Review of Broad Based Admission Practices
5. Working Group 5 – Assessment and Monitoring of Changes in Admission Policies

### **1. Working Group 1 – Review of the English Language Admission Standard**

#### Membership:

- Dr. Janet Giltrow, Associate Dean, Faculty of Arts, UBC-V (Chair)
- Mr. Andrew Arida, Associate Director, Enrolment, Enrolment Services
- Dr. Paul Harrison, Joint Faculties Senator, Faculty of Science, UBC-V
- Dr. Linda Hatt, Associate Dean, Barber School of Arts and Sciences, UBC-O
- Dr. Rita Irwin, Senator, Faculty of Education, UBC-V
- Ms. Karen McKellin, Acting Director, International Student Initiative
- Ms. Rosalie Vlaar, Senior Policy Analyst, Enrolment Services

The purpose of the English Language Admission Standard (ELAS) is to ensure that admitted undergraduate students are prepared to perform well in a rigorous English language academic environment. In general, the ELAS policy has achieved this goal. It has been recognized, however, that some aspects of the policy require review to better serve the interests of the University. As such, analysis and review is ongoing to ensure that best practices are in place.

This working group conducted a data-driven analysis of the relationship between first-year student performance at UBC and the method by which the ELAS requirement was satisfied. The analysis suggested that some methods of meeting the ELAS requirement are more likely to lead to student success at UBC than others.

First, the analysis offered an evaluation of UBC's current TOEFL criteria to meet the ELAS; raising the overall minimum TOEFL criteria by a small amount is likely to prevent students who tend to have lower first-year sessional averages from gaining admission to UBC.

Detailed examination resulted in the following recommendations for change:

- Requirement to meet minimum component requirements of English Language Proficiency Tests in one sitting (approved by the Vancouver Senate in February 2009)
- Raising the minimum internet-based TOEFL standard for each of the four exam components (Reading, Writing, Listening and Speaking) by one point and raising the required minimum composite TOEFL score from 86 to 90 (approved by the Vancouver Senate in March 2009)

Second, analysis of students admitted in 2007 reveals that those who satisfied ELAS on the basis of years of study in English may still be deficient in English language proficiency. Specifically, students can be admitted with English grades as low as 50%. A review of students who satisfy ELAS through years of study indicates that a minimum English grade above 50% may be justified. The implications of requiring a higher minimum Grade 12 English mark will be further examined by the ELAS working group.



Third, the ELAS working group is also examining the efficacy of International Baccalaureate (IB) English as a way to satisfy the ELAS requirement. Data indicate that students who meet ELAS by completing IB Standard Level English typically perform lower than average in their initial year at UBC, with a sessional average of 57%. Students who meet ELAS by completing IB Higher Level English typically have a sessional average of 70%. Based on these findings, the ELAS working group is currently examining the implications of raising the minimum standard of IB Standard Level English.

## **2. Working Group 2 – Level and Subject Matter of Secondary School Courses for Admission to UBC-Vancouver**

Membership:

- Dr. Peter Marshall, Senator, Faculty of Forestry, UBC-V (Chair)
- Ms. Christine Chen, Student, Faculty of Science, UBC-V
- Dr. Janet Giltrow, Associate Dean (Students), Faculty of Arts, UBC-V
- Ms. Cheryl Dumaresq, Director, Arts Academic Advising Services, UBC-V
- Dr. Paul Harrison, Joint Faculties Senator, Faculty of Science, UBC-V
- Dr. John LeBlanc, Associate Professor, Faculty of Creative & Critical Studies, UBC-O
- Ms. Deborah Robinson, Executive Coordinator, Enrolment Management Strategy
- Ms. Rosalie Vlaar, Senior Policy Analyst, Enrolment Services
- Mr. Azim Wazeer, Student Senator at-large, UBC-V

Working Group 2 was tasked with addressing the level and subject matter of secondary school courses used for admission to UBC Vancouver. The Group has examined the myriad ways in which an “admission average” is calculated for secondary school applicants. The initial review found that a number of current admission policies and practices may be working contrary to the Principles of Effective Undergraduate Admission to UBC. In particular, the three following principles are not being met:

### Alignment with UBC’s Goals

Current policies and practices lead to very different outcomes with respect to an admission average for students from various applicants groups. This results in variation of rates of admission from different groups thereby potentially limiting the identification and enrolment of top students.

### Fairness

This principle requires that applicants not be disadvantaged by the structure (timing, sequencing, grading schemes) of the educational system followed that provides the basis of admission. Current policies and practices lead to inconsistent inclusion or exclusion of courses from the calculation of an admission average. Jurisdictional variation in the number of courses required for the calculation of an admission average results in significantly different outcomes for applicants and impacts their relative competitiveness.

### Excellence of Fit:

The exclusion of some secondary school courses from admission consideration may prevent some programs from selecting applicants who are most likely to thrive in the academic environment they provide. For example, it may be appropriate to allow for the inclusion of a Fine Arts course in the selection of applicant to the Faculty of Arts or an academically oriented Physical Education and/or Health course for the calculation of an admission average for applicants to the School of Human Kinetics.

To date, the working group has undertaken a detailed analysis of current policies and practices as they relate to the calculation of an admission average. The group found there to be divergent criteria for secondary school course selection (i.e., eligibility for inclusion in the admission average) and inconsistencies in the number of courses included in an admission average.

The working group has also found there to be significant jurisdictional variation between the number and types of courses that may be considered in the calculation of an admission average. Within British Columbia, only “approved examinable” subjects are considered for admission and applicants are required to present four courses for admission.<sup>1</sup> Ontario students are required to present six courses while five courses are required from students from most other provinces.

A significantly larger number of academic subjects, most of which are not examined, are eligible for inclusion in an admission average for applicants from other provinces and countries, as indicated in the table below.

<b>Jurisdiction / Curriculum</b>	<b>Total number of approved courses</b>	<b># of approved social science, business &amp; humanity courses</b>	<b># of fine arts courses included in list</b>
British Columbia	18 (Vancouver) 21 (Okanagan)	3	0
Alberta	26	2	4
Saskatchewan	30	7	8
Manitoba	18	4	3
Ontario	48	24	5
Nova Scotia	21	7	2
International Baccalaureate	25+	9	3
US <sup>1</sup>	30+	9+	0-3
Rest of World <sup>1</sup>	28+	7+	0-3

1. Curricula in these jurisdictions are not standardized so the number of approved courses varies; however, the normal minimum number of eligible courses is listed for comparison purposes

The discussions of the working group have been focussed thus far on addressing admissions average and secondary school course requirements from students presenting Canadian secondary school credentials. The group is working towards establishing a set of principles, based on the Canadian context, which can be applied to secondary school credentials from other jurisdictions. The following issues, phrased as questions, will be

<sup>1</sup> The list of Approved Examinable Grade 12 Courses is available at:  
<http://www.students.ubc.ca/calendar/index.cfm?tree=2,22,63,0>

addressed by the working group as it continues its review of the level and subject matter of secondary school courses for admission to UBC Vancouver:

- What criteria ought to be used in determining the acceptability of a secondary school course for admissions consideration by UBC?
- How should the composition of courses that comprise an admission average to various programs be determined? Need it be identical among programs? If not, is there a need for some commonality?
- Should the number of courses used for calculating an admission average be consistent for applicants to a single program from different jurisdictions?
- Should the number of courses used for calculating an admission average be consistent across programs? If not, what is an acceptable range in numbers of courses to use in calculating an admission average for UBC?
- What role should Grade 11 courses play in admission? Should they solely be used as an admissions requirement for certain programs (i.e., as prerequisites for some courses required by UBC programs) or should certain Grade 11 courses also contribute to a student's admission average?
- How should additional components of the admission process (i.e., Broad Based Admission – BBA) be combined with the standard academic average component?

### **3. Working Group 3 – Implications of Optional Provincial Examinations and Comparative Standards**

Membership:

- Dr. Richard Anstee, Joint Faculties Senator, Faculty of Science, UBC-V (Chair)
- Mr. Andrew Arida, Associate Director, Enrolment, Enrolment Services
- Dr. James Brander, Senator, Faculty of Commerce & Business Administration, UBC-V
- Ms. Tarina Fernando, Student, Faculty of Science
- Dr. David Fielding, Senator, Faculty of Pharmaceutical Sciences, UBC-V
- Mr. William McNulty, Convocation Senator, UBC-V
- Ms. Rosalie Vlaar, Senior Policy Analyst, Enrolment Services

Working Group 3 was tasked with reviewing the implications of optional provincial examinations and comparative standards. The main issues under consideration by the working group are student performance and admission in the absence of standardized tests such as the provincial examinations, the evaluation of applicants in a changing secondary school environment and how the University is and/or should be evaluating grades from different educational jurisdictions in the admissions process.

#### Implications of Optional Provincial Examinations

Provincial examinations are now optional for BC secondary school students and are not required for admission to UBC, with the exception of English 12, which is required. Under this policy, an applicant's most advantageous grade – school final grade, school interim

grade or 'blended' grade – is used to make admissions decisions. As a starting hypothesis to guide the working group's examination, it was predicted that school to school admission averages will differ more than in the past as fewer students will write provincial exams in most subjects and the normalizing effect of provincial exams will therefore be reduced. The question of what impact this may have on admissions is being examined by the working group.

Currently, UBC (through Student Recruitment, Admissions, Financial Assistance and Awards) provides some general feedback to secondary schools on acceptance rates, scholarships awarded, etc. The working group proposes to give some suitable feedback to schools in BC concerning the difference between their students' success in secondary school (blended grades if available or school grade otherwise) and the students' success at UBC. This may be done subject by subject for Biology, Chemistry, English, Geography, History, Math and Physics where the students' success at UBC would be the success in that subject area with data provided for the group of students who attended UBC in the previous year (or a three-year period).

The working group's primary method of comparison across jurisdictions/schools has been to measure the effect of a student's secondary school when observing the relationship between the course-only grades used in the calculation of an admission average (specific to the student's UBC program of study) and the first-year sessional average.

In its review of 14,120 BC secondary school students entering UBC between 2003 and 2007, the working group found that the mean course-only grade for the course used in the admission average was 88.2% while the mean first-year sessional average at UBC was 70.3% (excluding students with a first year sessional average of 10% or less). This indicates that a typical student would obtain a first-year sessional average approximately 18 percentage points lower than the high school grade average for the courses used for admission.

Data collected by the working group indicates that there are dramatic differences across secondary schools in this effect. An admission average of 88% from some jurisdictions translates into much better performance at UBC than from others. The difference between secondary schools at each extreme is on the order of 16 percentage points. This is large in view of the fact that even a 3-4 percentage point difference would have a significant effect on who is admitted.

The data thus indicates a statistically significant relationship between the secondary school attended and first-year sessional averages (controlling for the student's admission average and UBC admission). Approximately half of the secondary schools reviewed presented a statistically significant effect on the student's first-year average relative to the norm or average. A significant systematic effect was also noted across school districts, although it is modest in size compared to the effect across specific schools.

The working group has had some preliminary discussion of explanations for this 'high school effect'. The analysis does not necessary imply that the high school effect is entirely or even largely due to differences in grading standards across schools and other possible explanations have been advanced. However, if differences in grading standards explain even part of the effect described above, this raises issues of fairness. Also, regardless of

the cause of the high school effect, the results raise serious questions about whether UBC will be selecting the students most able to succeed at UBC in the absence of provincial examinations.

Historically, large school to school differences have been documented over a number of years, particularly in Mathematics and Physics, which is consistent with the data examined by the working group. Although most admission decisions have (historically) been made prior to the completion of provincial examinations, if grading patterns at secondary schools remain unchanged, the effect of eliminating the provincial examinations would be to increase the high school effect in determining admission to UBC.

In general, provincial examinations tended to have the effect of lowering admission averages slightly. If grading practices remain unchanged, BC applicants will experience an increase in admission averages, relative to other jurisdictions thereby increasing the number of BC applicants admitted and reducing admissions from other jurisdictions. It remains to be seen whether grading standards will change in BC secondary schools in the absence of mandatory provincial examinations and whether variations across secondary schools will become even larger than they already are.

With respect to examining the implications of optional provincial examinations, the working group's on-going discussions will address the following questions:

- To what extent do we wish to respond to what may be 'grading standard' issues?
- Will our feedback change school grading standards?
- What about year to year variations in schools?
- To what extent are we measuring socio-economic factors of success at UBC rather than the impact of high school grades on performance?
- What are the implications for scholarships?
- Would a differential grade boost based on schools be palatable?

### Comparative Standards

In its analysis of data comparing Alberta to BC students, the working group has found a significant difference in first-year performance between Alberta and BC secondary school students. These findings are consistent with known differences in provincial grading schemes; where a letter grade of "A" is assigned in BC at 86% compared to 80% in Alberta. Based on first year performance at UBC, the difference in grading schemes could be addressed by giving Alberta secondary school applicants a 2% "boost" in their admission average. It should be noted that if an international jurisdiction has significant system-wide differences, admissions practices are adjusted for that jurisdiction.

#### **4. Working Group 4 – Review of Broad Based Admission Practices**

##### **Membership:**

- Ms. Katriona MacDonald, Assistant Dean, Faculty of Commerce & Business Administration, UBC-V (Chair)
- Dr. M. Clifford Fabian, Associate Dean, Faculty of Medicine, UBC-V
- Dr. David Fielding, Senator, Faculty of Pharmaceutical Sciences, UBC-V
- Dr. Janet Giltrow, Associate Dean, Faculty of Arts, UBC-V
- Ms. Karen McKellin, Acting Director, International Student Initiative
- Dr. Robert Sparks, Joint Faculties Senator, Faculty of Education, UBC-V
- Ms. Rosalie Vlaar, Senior Policy Analyst, Student Recruitment, Admissions & Awards, Enrolment Services
- Mr. Azim Wazeer, Student Senator at-large, UBC-V

At UBC, broad based admissions decisions are based on a combination of a student's academic performance and an assessment of a Supplemental Application. The process allows faculties employing a broad based admission process to make fine distinctions among large numbers of highly qualified applicants and employ a holistic review process that allows UBC to identify applicants that will best meet its mission objectives. In this context, academic merit is assessed on the basis of each applicant's achievements and potential in a broad range of academic disciplines, as influenced by the opportunities and challenges faced by the applicant.

The working group is reviewing broad based admission policies and practices currently in use across UBC faculties in light of the "Principles of Effective Undergraduate Admission to UBC" and in response to issues raised in a discussion document distributed at the Strategic Enrolment Management Steering Committee. The examination will include careful attention to the following principles:

##### **Fairness**

The principle of fairness requires that applicants not be disadvantaged by the structure of the educational system that provides the basis of admission. In further examining broad based admission policies in light of this principle, the working group will consider the following issues:

- Whether faculties have clearly identified the requisite broad based admission criteria and scoring guidelines to ensure different adjudicators are likely to reach similar scores and decisions on admissibility.
- Whether issues of reader bias have been considered and addressed in scoring/evaluation practices.
- How students from lower socio-economic backgrounds and/or from regions of the world with typically less access to (or culturally less inclined) extra curricular activities and experiences are typically considered in broad based admission assessment.

### Integrity

The working group will also examine whether broad based admission practices conform to policies. In its consideration of practices in light of the principle of integrity, the working group will examine the following issues:

- Whether faculties employing broad based admission practices ensure that policies have been approved by the Vancouver Senate, are clearly articulated in the UBC Calendar and faculty website.
- Whether current practices conform to articulated policies.
- How assessors/evaluators are trained to ensure consistent application of broad based admission review practices?

### Transparency

- Whether applicants are provided with a clear understanding of how broad based admission criteria will be used to determine their admissibility to the program.
- Whether applicants denied admission on the basis of broad based admission are advised of how they can improve a future application.

In its ongoing review, the Review of Broad Based Admissions Policies will also consider the following issues:

- How broad based admission policy aligns with UBC strategic goals:
  - What is the intent of broad-based admission policies – enrolment management, selecting students most likely to succeed at UBC, changing the qualitative experience in the classroom, etc?
  - Have programs that are employing broad based admission as an admission tool articulated the type(s) of students they are seeking and implemented the appropriate measures to effectively identify and admit those students?

The Working Group has tasked itself with:

- 1) Producing a summary review document outlining current Broad Based Admissions Practices used across campus and how those practices align with the “Principles of Effective Undergraduate Admission at UBC;”
- 2) Producing a set of Broad Based Admission Principles and Best Practices Guidelines for Faculties currently employing or planning to adopt a Broad Based Admission policy.

## **5. Working Group 5 – Assessment and Monitoring of Changes in Admission Policies**

### Membership:

- Dr. Bruce Dunwoody, Associate Dean, Faculty of Applied Science, UBC-V (Chair)
- Mr. Andrew Arida, Associate Director, Enrolment, Enrolment Services
- Dr. Robert Sparks, Joint Faculties Senator, Faculty of Education, UBC-V

- Dr. Thomas Ross, Senator, Faculty of Commerce & Business Administration, UBC-V
- Ms. Rosalie Vlaar, Senior Policy Analyst, Enrolment Services
- A representative from the Office of Planning and Institutional Research

Policies and procedures related to admissions and enrolment benefit from an ongoing review to ensure that they continue to support the mission and strategic objectives of the University and remain current and valid in light of changes in the educational environment and circumstances. The main issues under consideration by working group 5 are:

- Changing patterns in the applicant market;
- Changes in the patterns of availability of and demand for different modes of study;
- Changes in the nature of the qualifications offered by applicants.

The Admissions Committee, in consultation with students, faculty and staff, will continue its review of admission policies to ensure that it is guided by the Principles of Effective Undergraduate Admission to UBC and meets the academic needs of the University. As mentioned previously, the Committee will present its final report at the December 2009 meeting of Senate.



# THE UNIVERSITY OF BRITISH COLUMBIA



Vancouver Senate Admissions Committee  
c/o  
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April 28, 2008

**To: Vancouver Senate**  
**From: Admissions Committee**  
**Re: Review of UBC Undergraduate Admission Policies: Principles of Effective Undergraduate Admission to UBC (approval)**

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**Motion:** *That the report of the Admissions Committee on “Review of UBC Undergraduate Admission Policies: Principles of Effective Undergraduate Admission to UBC” be received and that the principles for effective undergraduate admission to UBC recommended therein be approved.*

At the December 2007 meeting of the Vancouver Senate, the Admissions Committee was directed to “undertake a review of UBC’s undergraduate admission policies with a view to determining their efficacy in meeting the goals of Trek 2010 and the UBC Academic Plan and report back to the Senate no later than December 2008 with recommendations on any necessary changes”. The report presented herein completes the reporting responsibility delegated to the Admissions Committee. If approved by Senate, the principles presented in the report would guide any subsequent review of admission policies and practices, and also guide policy-makers as they prepare new admission policies in the future.

The composition and terms of reference of the Admissions Subcommittee on the Review of UBC Undergraduate Admission Policies were as follows:

Composition:

- Dr. Bruce Dunwoody, Associate Dean, Faculty of Applied Science
- Dr. Paul Harrison, Joint Faculties Senator, Faculty of Science (Chair)
- Dr. Michael MacEntee, Senator, Faculty of Dentistry
- Mr. William McNulty, Convocation Senator
- Mr. Raymond Pan, Student Senator at-large, Faculty of Science
- Ms. Deborah Robinson, Associate Registrar & Director, Student Recruitment, Admissions & Awards, Enrolment Services
- Ms. Rosalie Vlaar, Senior Policy Analyst, Student Recruitment, Admissions & Awards, Enrolment Services
- Ms. Amandeep Mann (non-voting, Secretary)

Terms of Reference:

- 1) *To undertake a review of UBC’s undergraduate admission policies with a view to determining their efficacy in meeting the goals of Trek 2010 and the UBC Academic Plan.*
- 2) *To deliver to the Admissions Committee an oral status report on the activities of the Subcommittee at the March 2008 meeting of the Committee.*
- 3) *To submit to the Admissions Committee, via the Senate Secretariat, a final report with recommendations not later than April 23, 2008.*



The subcommittee fulfilled its mandate and its work forms the basis of this report to Senate, which summarizes the disjunction between UBC's goals for recruiting excellent students and some of its current policies and practices and then suggests principles that should underpin an effective set of admission policies. Corollaries to those principles are provided as a guide to the review of policies and practices to follow. Although the individual senates of the UBC V and UBC O campuses determine their own admission policies, it will be important for further discussions to include both campuses, if only to establish which policies will be in common and which will reflect the different mandates of the two campuses.

### **ANALYSIS: POLICY VS. TREK GOALS**

The Subcommittee reviewed documents and received oral input from the Undergraduate Admissions Office that helped to foster a discussion of the challenges and barriers to effective recruitment that are present in UBC's current practices. An earlier report on the BC provincial exam issue that formed the basis of a recommendation from the Admissions Committee to Senate in December 2007 also identified aspects of current practices that require review. Those practices have evolved from some that worked well when UBC recruited undergraduates almost entirely from BC high schools at a time when the school system was more uniformly structured and sequenced, and there was an excess of qualified applicants for most programs, the majority of whom saw UBC as their first (or only) choice for post-secondary education. Now BC schools are more variable in the way they structure the school year, with many more schools operating on a semester system than in the past, and the provincial exam system is more complex, with some exams mandatory in years prior to grade twelve and only one now mandatory in the final year. Further, UBC now aspires not only to serve BC but also to be a leading national and global university and so has to learn how to adapt its admission policies not only within BC but also to other educational jurisdictions. Finally, competition for the kind of students that UBC wants to attract has become more intense, within BC, across Canada, and over the globe. Reaction within the Undergraduate Admissions Office to that evolving landscape has resulted in new practices without a concomitant review of policy, and has led to periodic jurisdictional disagreements among the staff in the Admissions Office, representatives of faculties and Senate, and senior administration.

A search for principles on which to base a set of admission policies and practices should start with the University's overall goals. President Toope has argued that UBC should be recognized as the preeminent research-intensive university in the province and be supported financially so that it can become one of the world's great universities. To support that goal, our admission policies should ensure that the institution "...attracts and retains the best undergraduate and graduate students from across BC, Canada and the world" (Trek 2010, <http://www.trek2000.ubc.ca/principles/index.html>). Currently there are enough spaces in the BC post-secondary system to satisfy the needs of high school graduates but not enough spaces at UBC V for all who might apply. We may presume that students predisposed to take advantage of the kinds of opportunities that UBC hopes to offer them - in terms of academic challenge, involvement in research, service activities, and international exposure - will also be the most successful undergraduates and the most engaged alumni. Thinking along that line may provide some guidance on the development of principles for how the admission process should work to our advantage, for example by fitting admission criteria to both student accomplishments and the requirements for success in UBC programs.

Many current admission policies and practices may be keeping us from achieving our goals and a few are presented here. First, a desire to attract more students from other provinces may be hindered by the practice of equating school grades to a BC-derived standard without reference to the actual performance of students from different provinces at UBC. There are some data available, e.g., of performance in mathematics, that could inform the development of differentiated scales. Second, attracting good students from colleges outside BC and from other universities is difficult when UBC cannot inform applicants about the UBC equivalencies of the courses they have taken. We need a comprehensive, centrally maintained database. Third, with students being recruited from around the world there are opportunities for UBC faculties and schools to tailor their admission requirements to take advantage of the strengths and peculiarities



of local education systems but many UBC programs have not found ways to support the extensive use of broader-based admission. Fourth, it is imperative that UBC be able to present to prospective students a unified recruitment message and a common set of application processes, lest we confuse and discourage applicants at a time when they do not yet know much about UBC and can easily be influenced by clearer offers of admission from our competitors. Currently UBC does not integrate well enough the admission, housing, and scholarship components of a comprehensive offer. Last, although most students are, in effect, admitted to UBC on interim grades, it has been our tradition to wait for final grades to confirm offers. Increasingly, final grades do not become available until well after most applicants have been given firm and attractive offers of admission from other institutions.

It is still true that the majority of undergraduates admitted to UBC were schooled in the BC system and it is important to remember that UBC's admission requirements directly influence both the BC education system and individual student behaviour. For example, the continued presence of foreign language instruction in BC high schools is partly due to UBC's requirement of a second language for BC high school applicants. Any change in UBC's admission policy and practice should consider the effect on the BC education system and on individual student behaviour but change that could enhance recruitment of excellent students from any jurisdiction should not be avoided just because of its potential effects locally.

The examples above were sufficient evidence that UBC's admission practices needed a review but first it is necessary to define a set of principles. Principles can be used to test policies and practices to ensure that they are helping to meet the university's goals. The principles are presented below together with corollary statements that could guide any subsequent review of admission policies and practices, and we recommend them to Senate for approval.

## **PRINCIPLES OF EFFECTIVE UNDERGRADUATE ADMISSION TO UBC**

### **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.
- 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.



#### 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).

#### 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 disadvantaged as long as they 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 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 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 common minimum set of conditions for retention of offers of admission.

#### CONCLUSION

The analysis above serves to demonstrate the need to review admission policies as the environment in which the university exists continues to change. Universities are one of the few institutions that have survived since the Middle Ages but, although their role in modern society owes much to the past, they are not the same institutions nor are the social determinants of their viability the same and they must adapt. It is relatively easy to make changes for the sake of competitive advantage, for example, but it is also easy to make changes that may have only a short-term benefit. Policies to be developed must be founded on a set of guiding principles and where two or more principles are in conflict, the resolution should always aim to achieve the overall goals of the University. A set of principles is presented in this report in the hope that it will set in motion a thorough review of policies and practices in the Undergraduate Admissions Office at UBC Vancouver overseen by the Senate Admissions Committee. Unless changes are made, UBC is unlikely to continue to be an institution that “...*attracts and retains the best undergraduate...students from across BC, Canada and the world*” (Trek 2010).

Further review should involve wider consultation with students, faculty, and staff at UBC V, with constituent groups such as school teachers, counsellors and college representatives, and also with colleagues at UBC O, the latter to determine where common policies are appropriate. The review must encompass policy and practice in the areas of student housing and financial assistance and awards as well because of the critical roles played by those resources in attracting and retaining excellent students. The Admissions Committee is prepared to work with Enrolment Services and the Student Awards Committee to ensure that the review is guided by the principles presented here and meets the academic needs of the institution.

# THE UNIVERSITY OF BRITISH COLUMBIA



April 2, 2009

**CURRICULUM COMMITTEE**  
**Vancouver Senate**  
2016 - 1874 East Mall  
Vancouver, B.C. Canada V6T 1Z1

To: Vancouver Senate

From: Senate Curriculum Committee

Re: April Curriculum Proposals (**approval**)

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

As such, the following is recommended to Senate:

**Motion:** *That the curriculum proposals brought forward by the Faculties of Applied Science, Graduate Studies (College for Interdisciplinary Studies, Land & Food Systems, and Science), and Science be approved.*

Respectfully submitted,

Peter Marshall, Chair  
Senate Curriculum Committee

# THE UNIVERSITY OF BRITISH COLUMBIA



Vancouver Senate Curriculum Committee

c/o

**Enrolment Services | Senate & Curriculum Services**

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

jonathan.preston@ubc.ca | PH 604.822.9134 | FX 604.822.5945

2 April 2009

To: Vancouver Senate  
From: Senate Curriculum Committee  
RE: Faculty of Applied Science

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Attached please find proposals for a new course and a calendar change for your consideration.

**New Course**

MINE 488 (3)

**Calendar Change**

Pre-Med Alternative Path



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Applied Science <b>Department:</b> <b>Faculty Approval Date:</b> <b>Effective Session:</b> September 2009	<b>Date:</b> January 28, 2009 <b>Contact Person:</b> Michael Hitch <b>Phone:</b> 604-827-5089 <b>Email:</b> mhitch@mining.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>MINE 488 (3)</b> Heavy Oil Sand Mining and Processing  Life cycle of the production of Oil Sands resources, including mining, bitumen extraction and reclamation. [2-3-0]  <i>Prerequisite:</i> None	<b>URL:</b> N/A  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> New Course  <b>Rationale:</b> The recovery of oil from Oil Sands deposits is a unique area of mining that is growing in importance to Canada's economy. This course will raise awareness of the uniqueness of this resource and prepare students to meet the challenges in this growing industry.





## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<p><b>Faculty:</b> Applied Science</p> <p><b>Department:</b> -</p> <p><b>Faculty Approval Date:</b> March 9, 2009</p> <p><b>Effective Session</b> _09_ <b>Term</b> 1</p> <p>Year <b>2009</b> for Change</p>	<p><b>Date:</b> 9 March 2009</p> <p><b>Contact Person:</b> Bruce Dunwoody</p> <p><b>Phone:</b> 2-6556</p> <p><b>Email:</b> bruce.dunwoody@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>Pre-Med Alternative Path</b></p> <p>This alternative path is intended for students with an engineering background wishing to apply to medical schools. It provides access to courses required by many medical schools for students to be considered for admission. Registration in this alternative path is very competitive and is limited.</p> <p>Students in this path follow the same requirements for first year engineering with the following modifications, where they take:</p> <ul style="list-style-type: none"> <li>(APSC 151, CHEM 121 and CHEM 123) instead of (APSC 150 and CHEM 154).</li> <li>a first-year English course (ENGL 110, 111, 120 or 121) in place of a humanities elective. This is in addition to the required ENGL 112.</li> </ul> <p>The following courses are also required after first year:</p> <ul style="list-style-type: none"> <li>BIOL 121, BIOL 140, CHEM 205, CHEM 233 and CHEM 235.</li> <li>BIOC 300</li> </ul> <p>Special standard timetables are available for first year courses.</p> <p>Given the additional courses taken over and above the engineering degree, students should on the average expect an additional term to complete these course requirements along with their engineering degree requirements. Some courses may be offered in the summer term. Some programs may accept selected courses above as part of their degree</p>	<p><b>URL:</b></p> <p><a href="http://www.students.ubc.ca/calendar/index.cfm?tree=12,195,272,33">www.students.ubc.ca/calendar/index.cfm?tree=12,195,272,33</a></p> <p><b>Present Calendar Entry:</b></p> <p>There is currently no Calendar entry. This Calendar entry will appear just below the <b>Dual Degree Program in Arts and Applied Science</b> entry.</p> <p><b>Type of Action:</b></p> <p>Add text.</p> <p><b>Rationale:</b></p> <p>This proposal is for an undergraduate alternative path that allows engineering students organized access to courses required for application to medical school while completing their accredited engineering degree.</p> <p>While this alternative path will be clearly appreciated by engineering students, it will also help diversify the pool of applicants to medical schools, something that medical schools are working to achieve. By allowing more engineering students to qualify for application to medical schools, we hope to provide technology-savvy candidates who will be at ease in today's highly technological medical field.</p>



THE UNIVERSITY OF BRITISH COLUMBIA

requirements thus reducing the additional time needed. Consult the specific calendar entry for these programs for details.

Different medical schools have different course requirements. Students are strongly advised to verify the course requirements with prospective medical schools. It should also be noted that the course requirement is only one of the criteria used by medical schools to assess applications. It is the student's responsibility to inform themselves of the applicable criteria.

# THE UNIVERSITY OF BRITISH COLUMBIA



Vancouver Senate Curriculum Committee

c/o

**Enrolment Services | Senate & Curriculum Services**

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

jonathan.preston@ubc.ca | PH 604.822.9134 | FX 604.822.5945

2 April 2009

To: Vancouver Senate  
From: Senate Curriculum Committee  
RE: Graduate Proposals

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Attached please find proposals for new courses, a calendar change, and a new dual degree program for your consideration.

## **College for Interdisciplinary Studies**

*New Dual Degree Program*

M.A.A.P.S./M.A.P.

## **Graduate Studies**

*Calendar Change*

Grading Practices

## **Land & Food Systems**

*New Course*

ANSC 549 (12/18)

## **Science**

*New Courses*

BIOC 549 (18)

EOSC 516 (2)

PHYS 560 (3)



## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<b>Faculty:</b> College for Interdisciplinary Studies <b>Department:</b> Institute of Asian Research <b>Faculty Approval Date: March 18, 2008</b>  <b>Effective Session</b> Winter Session, First Term 2009	<b>Date:</b> October 25, 2007 <b>Contact Person:</b> Michael Leaf <b>Phone:</b> 2-3288 <b>Email:</b> leaf@interchange.ubc.ca  [corrected 10/08; 2/09]
<b>Proposed Calendar Entry:</b>  <b>Master of Arts in Asia-Pacific Policy Studies / Master of Arts in Planning</b>  <b>Members</b>  <b>Professors</b>  T. Brook, T. Cheek, A. H. J. Dorsey, P. Evans, T. A. Hutton, P. C. Gurstein, T. L. McDaniels, M. Nakamura, P. Potter, W. E. Rees, L. Sandercock, H. Schreier I. Vertinsky.  <b>Associate Professors</b>  L. C. Angeles, S. E. Chang, L. D. Frank, M. Kandlikar, A. Kusno, M. Leaf, K. A. Park.  <b>Assistant Professors</b>  A. Bailey, J. Dierkes, M. Fryer, H. G. Lynn, M. W. Senbel, T. Shakya.  This program enables students to obtain the MAAPS and MAP degrees through a concurrent course of study. The program enables students enrolled in Asia-Pacific Policy Studies and in Planning to pursue a specialized curriculum in community and	<b>URL:</b> <a href="http://www.students.ubc.ca/calendar/index.cfm?tree=12,287,873,1386">http://www.students.ubc.ca/calendar/index.cfm?tree=12,287,873,1386</a>  <b>Present Calendar Entry:</b> N/A  <b>Type of Action:</b> New Program under section of Calendar: Dual Degree Programs. <a href="http://www.students.ubc.ca/calendar/index.cfm?tree=12,204,828,1405">http://www.students.ubc.ca/calendar/index.cfm?tree=12,204,828,1405</a>  <b>Rationale:</b> The Asia-Pacific Region is experiencing the greatest transformation in its long history. Urbanization is happening at a phenomenal speed in both relative and absolute numbers, leading to huge population displacements, environmental problems, and political change. The economic centre will be shifting from West to East. There is no question that Asia Pacific Policy Studies combined with community, urban, regional and environmental studies, which is what SCARP can offer, will lead qualified individuals to find professional work in this interconnected world. Graduates from the new dual MAAPS/MAP would qualify for appointments to government departments at all hierarchical levels as well as non-profit organizations. At the same time, there are substantial opportunities for



regional planning (leading to an accredited professional degree) and Asia-Pacific Policy Studies.

**Admission Requirements:**

Students wishing to pursue the MAAPS/MAP dual degree program must be admitted separately to Asia-Pacific Policy Studies for the MAAPS degree and to Planning for the MAP degree. Those seeking admission to the dual degree program must provide notice to this effect in their applications to IAR and SCARP, indicating in writing their desire to enroll in the MAAPS/MAP program and the desired areas of specialization in both.

Students wishing to transfer to the MAAPS/MAP program from another UBC program must satisfy all requirements for admission to Asia-Pacific Policy Studies

(<http://www.iar.ubc.ca/mapps/programdetails/admission.aspx>) and to Planning (<http://www.scarp.ubc.ca/masadmis.htm#Core>). This may involve separate graduate study applications to FoGS if the student is not currently registered in a graduate program.

Enrollment in the dual degree program requires the consent of the Director of IAR and the Director of SCARP.

**Program Requirements:**

Students in the MAAPS/MAP dual degree program are required to complete all course requirements for graduation in both Master's programs, subject to the following modifications:

- Completion of IAR 500 will count for six credits towards MAAPS and six credits towards MAP degrees
- 6 credits of coursework in MAP will be counted towards MAAPS electives.
- Students are required to complete either a 12-credit thesis or a 12-credit

employment in the private sector. The research elements of the program—a thesis in planning and a field research exercise or Practicum in MAAPS will enable graduates to be well prepared for admission to doctoral programs if they so desire.



practicum.

With these modifications, a total of 78 credits are required for graduation, Total Credits:  
78 (MAAPS:30// MAP: 48)

The MAAPS and MAP will be conferred at the completion of the dual program after all requirements for both degrees have been met. Students who choose to receive either the MAAPS or the MAP prior to completion of the dual degree program may apply for one of the degrees provided all requirements for that degree have been satisfied. Students selecting this option must withdraw from the dual degree program.

### Contact Information

Institute of Asian Research  
C.K. Choi Building, 251–1855 West Mall  
Vancouver, BC, Canada V6T 1Z2  
Tel: 604.822.3801  
Fax: 604.822.5207  
Email: [mapps@interchange.ubc.ca](mailto:mapps@interchange.ubc.ca)  
Web: [www.iar.ubc.ca/mapps](http://www.iar.ubc.ca/mapps)  
**Nilda Oñate**, M.A.A.P.S. Graduate Secretary



## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<p><b>Faculty: Graduate Studies</b>  <b>Department: Dean's Office</b>  <b>Faculty Approval Date:</b></p> <p><b>Effective Session</b> <u>summer</u> <b>Term</b>  <u>1</u> <b>Year</b> <u>2009</u> <b>for Change</b></p>	<p><b>Date: February 9, 2009</b>  <b>Contact Person: Joyce Tom</b>  <b>Phone: 2-6965</b>  <b>Email: joyce.tom@ubc.ca</b></p>																																																
<p><b>Proposed Calendar Entry:</b></p> <p><u><a href="#">Grading Practices</a></u> &gt; <i>Introduction</i></p> <p>In most faculties, individual courses are normally graded as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #4a7ebb; color: white;"> <th>Percentage (%)</th><th>Letter Grade</th></tr> </thead> <tbody> <tr><td>90–100</td><td>A+</td></tr> <tr><td>85–89</td><td>A</td></tr> <tr><td>80–84</td><td>A-</td></tr> <tr><td>76–79</td><td>B+</td></tr> <tr><td>72–75</td><td>B</td></tr> <tr><td>68–71</td><td>B-</td></tr> <tr><td>64–67</td><td>C+</td></tr> <tr><td>60–63</td><td>C</td></tr> <tr><td>55–59</td><td>C-</td></tr> <tr><td>50–54</td><td>D</td></tr> <tr><td>0–49</td><td>F (Fail)</td></tr> </tbody> </table> <p>Instructors are responsible for providing written guidelines to all students at the start of each course, outlining how the final grade for the course will be calculated, and including any related policies such as arrangements that may be made for students who are unable to complete a test or other graded work because of short term illness or for other reasons. Guidelines made available on the Web meet this requirement (students who are unable to access the Web should ask their instructor to provide these guidelines in an <b>alternative</b> format).</p> <p>If a student in a baccalaureate program who receives a "T" standing in a graduating essay or other course approved by the faculty completes the course within 12 months of the end of the term in which the student first registered for the course the "T" standing will be replaced by the grade assigned. If the course is not completed within 12 months the "T" standing will be replaced by a grade of zero (or "F" standing in a Pass/Fail course).</p> <p>The <b>Faculty</b> of Dentistry, the Schools of Library,</p>	Percentage (%)	Letter Grade	90–100	A+	85–89	A	80–84	A-	76–79	B+	72–75	B	68–71	B-	64–67	C+	60–63	C	55–59	C-	50–54	D	0–49	F (Fail)	<p><b>URL:</b>  <a href="http://www.students.ubc.ca/calendar/index.cfm?tree=3,42,96,0">http://www.students.ubc.ca/calendar/index.cfm?tree=3,42,96,0</a></p> <p><b>Present Calendar Entry:</b>  <u>Page 54, column 2</u></p> <p><u><a href="#">Grading Practices</a></u> &gt; <i>Introduction</i></p> <p>In most faculties, individual courses are normally graded as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #4a7ebb; color: white;"> <th>Percentage (%)</th><th>Letter Grade</th></tr> </thead> <tbody> <tr><td>90–100</td><td>A+</td></tr> <tr><td>85–89</td><td>A</td></tr> <tr><td>80–84</td><td>A-</td></tr> <tr><td>76–79</td><td>B+</td></tr> <tr><td>72–75</td><td>B</td></tr> <tr><td>68–71</td><td>B-</td></tr> <tr><td>64–67</td><td>C+</td></tr> <tr><td>60–63</td><td>C</td></tr> <tr><td>55–59</td><td>C-</td></tr> <tr><td>50–54</td><td>D</td></tr> <tr><td>0–49</td><td>F (Fail)</td></tr> </tbody> </table> <p>Instructors are responsible for providing written guidelines to all students at the start of each course, outlining how the final grade for the course will be calculated, and including any related policies such as arrangements that may be made for students who are unable to complete a test or other graded work because of short term illness or for other reasons. Guidelines made available on the Web meet this requirement (students who are unable to access the Web should ask their instructor to provide these guidelines in an <b>alternate</b> format).</p> <p>If a student in a baccalaureate program who receives a "T" standing in a graduating essay or other course approved by the faculty completes the course within 12 months of the end of the term in which the student first registered for the course the "T" standing will be replaced by the grade assigned. If the course is not completed within 12 months the "T" standing will be replaced by a grade of zero (or "F" standing in a Pass/Fail course).</p>	Percentage (%)	Letter Grade	90–100	A+	85–89	A	80–84	A-	76–79	B+	72–75	B	68–71	B-	64–67	C+	60–63	C	55–59	C-	50–54	D	0–49	F (Fail)
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Archival and Information Studies, Nursing, and Rehabilitation Sciences, define Fail (F) as below 60%.

**For master's students registered in the Faculty of Graduate Studies, Fail (F) for individual courses is defined as below 60%:**

Percentage (%)	Letter Grade
90–100	A+
85–89	A
80–84	A-
76–79	B+
72–75	B
68–71	B-
64–67	C+
60–63	C
0–59	F (Fail)

However, only 6 credits of pass standing (60-67%) may be counted towards a master's program. For all other courses, a minimum of 68% must be obtained. Some graduate programs may require a higher passing grade for specific courses.

**For doctoral students registered in the Faculty of Graduate Studies, Fail (F) for individual courses is defined as below 68%. Some graduate programs may require a higher passing grade for specific courses.**

Percentage (%)	Letter Grade
90–100	A+
85–89	A
80–84	A-
76–79	B+
72–75	B
68–71	B-
0–67	F (Fail)

In the Faculty of Medicine, individual courses in the Doctor of Medicine undergraduate program are graded on an Honours (H), Pass (P), Fail (F) system. The Faculty defines Fail as below 60% and a Pass as 60% or greater, but below Honours. An Honours grade is assigned by individual course directors and approved by the promotions committee.

Faculties, departments and schools reserve the right to scale grades in order to maintain equity among sections and conformity to University, faculty, department, or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department or school. Grades are not official until they appear on a student's academic record.

The **Faculties of Dentistry and Graduate Studies and the Schools of Library and Archival Studies**, Nursing, and Rehabilitation Sciences, define Fail (F) as below 60%.

In the Faculty of Medicine, individual courses in the Doctor of Medicine undergraduate program are graded on an Honours (H), Pass (P), Fail (F) system. The Faculty defines Fail as below 60% and a Pass as 60% or greater, but below Honours. An Honours grade is assigned by individual course directors and approved by the promotions committee.

Faculties, departments and schools reserve the right to scale grades in order to maintain equity among sections and conformity to University, faculty, department, or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department or school. Grades are not official until they appear on a student's academic record.

### Type of Action:

- add statements and tables describing grading for master's and doctoral students  
<http://www.students.ubc.ca/calendar/index.cfm?tree=3,42,96,0>
- add tables describing grading for master's and doctoral students in FGS chapter  
<http://www.students.ubc.ca/calendar/index.cfm?tree=12,204,342,615>
- correct typographical errors

### Rationale:

The change makes the description in this part of the Calendar consistent with the current requirements described in the Faculty of Graduate Studies section of the Calendar for master and doctoral students.

<http://www.students.ubc.ca/calendar/index.cfm?tree=12,204,342,615>





## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<b>Faculty:</b> Land & Food <b>Systems/Graduate Studies</b> <b>Department:</b> Animal Science <b>Faculty Approval Date:</b> June 26, 2008 <b>Effective Session:</b> 08W	<b>Date:</b> December 11, 2008 <b>Contact Person:</b> Marina von Keyserlingk (Graduate Advisor) <b>Phone:</b> 822-2040 <b>Email:</b> nina@interchange.ubc.ca
<b>Proposed Calendar Entry:</b> ANSC 549 (12/18)C Master's Thesis	<b>URL:</b> ANSC 549  <b>Present Calendar Entry:</b> ANSC 549 (12) Master's Thesis  <b>Type of Action:</b> Change credits for MSc thesis to include an 18 credit option as well as the 12 credit option.  <b>Rationale:</b> Students who are planning a professional career will typically enroll in the 12 credit thesis option; thus, requiring a minimum of 18 credits of course work to complete the 30 credits required for the completion of the degree. This 18 credit thesis option will be particularly appropriate for students considering a PhD program and/or a research career.
<b>Proposed Calendar Entry:</b> <b>Master of Science .....</b> <b>Program Requirements</b> Completion of the M.Sc. program requires a thesis (12 or 18 credits) plus coursework, for a total of 30 credits. With a 12 credit thesis, students can include a maximum of 6 credits senior undergraduate courses. With an 18 credit thesis, students can include a maximum of 3 credits senior undergraduate courses. Students who are planning a professional career will typically enroll in the 12 credit thesis option. The 18 credit value option requires a more intensive research experience and is more appropriate for students considering the PhD program or research career. The	<b>URL:</b> <a href="http://www.students.ubc.ca/calendar/index.cfm?tree=12,204,828,1113">http://www.students.ubc.ca/calendar/index.cfm?tree=12,204,828,1113</a>  <b>Present Calendar Entry:</b> <b>Master of Science .....</b> <b>Program Requirements</b> Completion of the M.Sc. program requires a minimum of 18 credits of coursework, plus 12 credits of thesis research.  <b>Type of Action:</b> Change course credit allocation within the ANSC M.Sc. program to allow students with an intensive research experience to complete an 18 credit thesis and reduce their coursework from 18 credits to 12

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thesis credit decision should be determined in consultation with the student and research advisor.

(maximum 3 credits of senior undergraduate courses). The total credits assigned to the M.Sc. in Animal Science remains at 30.

**Rationale:** See rationale for ANSC 549 (12) Master's Thesis curriculum change (above).

Contact: Dr. Bill Ramey Phone: 822-3300	Faculty Approval Date: Email: <a href="mailto:wramey@interchange.ubc.ca">wramey@interchange.ubc.ca</a>
<b>BIOCHEMISTRY</b>	
<b>Effective Date for Change:</b> 09WT1 <b>Proposed Calendar Entry:</b>  BIOC 549 ( <b>18</b> ) M.Sc. THESIS	<b>Present Calendar Entry:</b>  BIOC 549 ( <del>12</del> ) M.Sc. THESIS  <b>Action:</b> Credit value of the BIOC 549 M.Sc. Thesis is changed from 12 to 18 credits. <b>Rationale:</b> The M.Sc. Thesis in Biochemistry and Molecular Biology represents a rigorous 2-3 year program of laboratory research and subsequent publication of the results obtained. Research activities toward the thesis make up >80% of a student's effort in the program. This is inconsistent with the M.Sc. thesis currently being assigned only 40% of the 30 credits of the degree. Furthermore, since the thesis portion of the M.Sc. degree is assigned too few credits in relation to the time commitment involved, students must take additional formal courses into their second year, significantly infringing on research time. A departmental decision has been made to more appropriately recognize the current effort students make to the M.Sc. thesis by assigning it 18 credits. This action will also bring our M.Sc. thesis credit value in line with other related research intensive departments -- CHEM 549 (18), ZOOL 549 (18), CELL 549 (18), BOTA 549 (18). This change will have no impact on the budget or the library because the course requirements are unchanged. <b>Supporting Documents:</b> SCI-08-2-BIOC 549

## EARTH & OCEAN SCIENCES

<p><b>Effective Date for Change:</b> 09WT1 <b>Proposed Calendar Entry:</b></p> <p><b>EOSC 516 (2) TEACHING AND LEARNING IN EARTH AND OCEAN SCIENCES.</b> (pass/fail)</p>	<p><b>Present Calendar Entry:</b></p> <p>New course</p> <p><b>Action:</b> add new course with pass/fail grading</p> <p><b>Rationale:</b> Teaching is very important to the Earth and Ocean Sciences Department. Thus, like other departments in Science (notably, Physics, Biology, and Mathematics) EOS is developing a course on Teaching and Learning for graduate students in Earth and Ocean Sciences. This course will allow us to fulfill the training of graduate students for the specific demands in their discipline and prepare for university teaching. The course will be evaluated as pass/fail.</p> <p><b>Supporting Documents:</b> SCI-08-2-EOSC 516</p>
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## PHYSICS & ASTRONOMY

<p><b>Effective Session</b> 09WT1 <b>Proposed Calendar Entry:</b></p> <p><b>PHYS 560 (3) PHYSICS AND ENGINEERING OF PARTICLE ACCELERATORS.</b></p> <p><b>Injectors, radio frequency acceleration, superconducting acceleration elements, beam dynamics and applications of electron accelerators.</b></p> <p>[</p>	<p><b>Present Calendar Entry:</b></p> <p>None.</p> <p><b>Type of Action:</b> Add new graduate course</p> <p><b>Rationale:</b> Accelerator Physics has long been offered as an area of research for graduate students in the Department of Physics and Astronomy, but course offerings have typically been once every few years, offered as a Directed Studies special topic course (it is currently offered as PHYS 555B 207). With the recent expansion of TRIUMF's Accelerator Physics research program, and plans to construct a superconducting electron accelerator, a graduate course in Accelerator Physics should be formalized.</p> <p><b>Supporting Documents:</b> SCI-08-2-PHYS 560</p>
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# THE UNIVERSITY OF BRITISH COLUMBIA



Vancouver Senate Curriculum Committee

c/o

**Enrolment Services | Senate & Curriculum Services**

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

Jonathan.Preston@ubc.ca | PH 604.822.9134 | FX 604.822.5945

2 April 2009

To: Vancouver Senate

From: Senate Curriculum Committee

RE: Faculty of Science

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Attached please find proposals for new courses and for calendar changes for your consideration.

## **New Courses**

BIOL 340 (3)

BIOL 341 (2)

CPSC 110 (4)

CPSC 210 (4)

CPSC 301 (3)

## **Calendar Changes**

MATH 100 (3)

MATH 102 (3)

MATH 104 (3)

MATH 180 (4)

MATH 184 (4)

<b>Contact: Dr. Bill Ramey</b> <b>Phone: 822-3300</b>		<b>Faculty Approval Date:</b> <b>Email: wramey@interchange.ubc.ca</b>	
<b>BIOLOGY</b>			
<b>Effective Date for Change:</b> 09WT1 <b>Proposed Calendar Entry:</b> ... <b>BIOL 340 (2) Introductory Cell Biology Laboratory.</b>  <b>Experiments using unicellular eukaryotes or prokaryotes with emphasis on techniques in microscopy and cell biology.</b> <b>Prerequisite: BIOL 140, BIOL 200 and at least third year standing in Science [1-3-0].</b> ...		<b>Present Calendar Entry:</b>  None  <b>Action:</b> New course. <b>Rationale:</b> One of the objectives of the current revision of the biology program is to provide a core laboratory experience for all students in their main area of interest at the third year level. This is one of a pair of courses that introduces techniques in cell and molecular biology. The emphasis on this course is design of experiments and acquisition of basic manipulative and observational skills in cell biology. The companion course BIOL 341 introduces basic molecular biology techniques for DNA manipulation. To this point these skills have only been taught in smaller courses, and many students whose interests are chiefly in the cell and molecular biology area do not presently receive laboratory instruction in these areas. This proposal is to incorporate the teaching of cell and molecular biology techniques as a core component of the program.  The first offering of BIOL 340 is intended for 09WT1 where along with BIOL 341 it will provide a panel of 2 courses that can be used to replace BIOL 360 in the CGBI program. BIOL 360 will continue to be offered for one more year but will be eliminated for 10W, after which time BIOL 340 and 341 will act as third year laboratories for students in CGBI. <b>Supporting Documents: SCI-08-2-BIOL 340</b>	

<p><b>Effective Date for Change:</b> 09WT2  <b>Proposed Calendar Entry:</b>  ...  <b>BIOL 341 (2) Introductory Molecular Biology Laboratory.</b>    <b>Use of recombinant DNA techniques.</b>  <b>Prerequisite: BIOL 200 and at least third year standing in Science. [1*-4-0]</b>  ...</p>	<p><b>Present Calendar Entry:</b>    None</p> <p><b>Action:</b> New Course  <b>Rationale:</b> Over the last 20 years the techniques of molecular biology have become pervasive in many areas of the Biological Sciences, having applications in sub-fields such as ecology, evolutionary biology, physiology, cell biology, and genetics. However, the only existing UBC laboratory courses focusing on this area that are available to students in the Biology Program are taught at a relatively advanced level to small numbers of specialist students. The proposed course will fill this void in our offerings by providing an introductory course that will be available to a much larger number of students, enhancing course availability, flexibility in programming, and experiential learning for students.</p> <p>The first offering of BIOL 341 is intended for 09WT2 where along with BIOL 340 it will provide a panel of 2 courses that can be used to replace BIOL 360 in the CGBI program. BIOL 360 will continue to be offered for one more year but will be eliminated for 10W, after which time BIOL 340 and 341 will act as third year laboratories for students in CGBI.</p> <p><b>Supporting Documents: SCI-08-2-BIOL 341</b></p>
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<b>COMPUTER SCIENCE</b>	
<p><b>Effective Date for Change:</b> 09WT1 <b>Proposed Calendar Entry:</b></p> <p><b>CPSC 110 (4) Computation, Programs and Programming</b></p> <p><b>Fundamental program and computation structures. Introductory programming skills. Computation as a tool for information processing, simulation and modeling, and interacting with the world. Prerequisite: Principles of Mathematics 12. [3-3-0]</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None.</p> <p><b>Action:</b> New course. <b>Rationale:</b> We propose a new introductory course in Computer Science. Together with a companion proposal for CPSC 210, these two courses are intended to replace the existing CPSC 111, CPSC 211 sequence.</p> <p>Computation, programs and programming play a vital role in the work of scientists and other professionals: they allow us to gather data; develop computational models and simulations; organize, store, analyze and visualize information, and so on. (Not to mention sending email, connecting on Facebook and browsing the web.)</p> <p>The goals of this course are to provide students with the knowledge and skills to write programs of their own, as well as to understand more deeply how computation and programs work. We aim to prepare students for further course-based and independent learning of Computer Science skills and concepts. We also aim to present this material in a way that is interesting, accessible and useful to a wide range of students.</p> <p><b>Supporting Documents: SCI-08-2-CPSC 110</b></p>



<p><b>Effective Date for Change:</b> 09WT1 <b>Proposed Calendar Entry:</b></p> <p><b>CPSC 210 (4) Software Construction</b></p> <p><b>Design, development and analysis of robust software components. Topics such as software design, computational models, data structures, debugging and testing.</b> <b>Prerequisite: One of CPSC 110, CPSC 260. [3-2-0]</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None.</p> <p><b>Action:</b> New course. <b>Rationale:</b> Together with a companion proposal for CPSC 110, these courses are intended to replace the existing CPSC 111, 211 sequence.</p> <p>Software systems are amongst the most complex systems ever built by humans. Two fundamental concepts central to supporting the construction and evolution of software systems are abstraction and decomposition. Building on the introduction to these concepts in a prerequisite course (i.e., CPSC 110 or CPSC 260), CPSC 210 will explain how these concepts manifest over and over again in different forms as we build larger and larger computations and systems.</p> <p>CPSC 210 will describe how software systems students interact with everyday (as well as other systems surrounding them) work. The course will demonstrate some of the essential complexities and intellectual challenges of developing software systems that solve real problems. Students will gain the knowledge and skills to build and modify programs of non-trivial size (i.e., thousands of lines of code). <b>Supporting Documents: SCI-08-2-CPSC 210</b></p>
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<p><b>Effective Date for Change:</b> 09WT1 <b>Proposed Calendar Entry:</b></p> <p><b>CPSC 301 (3) COMPUTING IN THE LIFE SCIENCES</b></p> <p><b>Basic concepts, tools and techniques for working with scientific data at larger scales, higher speeds and lower costs that would otherwise be impossible. Applications and examples drawn from the life sciences. No prior computing background is required. Not for credit for students who have credit for any of the following: APSC 160, Computer Science AP, CPSC 110, CPSC 111, EOSC 211 or transfer credit equivalent to CPSC 111.</b></p> <p><b>Prerequisites: One of MATH 101, 103, 105, 121 or Science One. Third year standing or higher. [3-2-0]</b></p>	<p><b>Present Calendar Entry:</b></p> <p>None.</p> <p><b>Action:</b> New course.</p> <p><b>Rationale:</b> Although they are very good at it, computers are not just for word processing and networks are not just for downloading music. Computer science is the study of process, and when a process is automated the results can be revolutionary; for example, consider the explosion of gene sequence data since the advent of automated sequencing. Computer algorithms are increasingly in control of our lives in obvious – such as Google – and sometimes not so obvious – such as consumer credit ratings – ways. The inevitable conclusion is that computers and their networks are vital tools for creation, collection, analysis, visualization and storage of data throughout all fields of the sciences, arts, business, and engineering.</p> <p>Unfortunately, the computer fluency of many students is limited to tools like word processors and web browsers. A symptom of this lack of basic computing knowledge is the slow, frustrating and error-prone but all too common practice of manually transcribing data between applications, either by cut and paste or by typing numbers, simply because the two applications use different storage formats.</p> <p>While there are other computing courses throughout the Faculty of Science, these classes are focused on programming skills, are discipline dependent, and/or require numerous prerequisites. Designed for students with no previous university level computing experience, this course will introduce general concepts of information storage, transmission, retrieval, manipulation and visualization. The emphasis will be on practical tools and techniques, with applications and examples drawn from throughout science but in particular from the life sciences.</p> <p><b>Supporting Documents: SCI-08-2-CPSC 301</b></p>
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MATHEMATICS	
<p><b>Effective Date for Change:</b> 09WT1 <b>Proposed Calendar Entry:</b></p> <p>MATH 100 (3) Differential Calculus with Applications to Physical Sciences and Engineering ...</p> <p>Prerequisite: <b>High-school calculus and one of (a) a grade of 80% or higher in BC Principles of Mathematics 12 (or equivalent), (b) a score of 73% or higher in the BC provincial examination for Principles of Mathematics 12, or (c) a satisfactory score in the UBC Mathematics Basic Skills Test.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>MATH 100 (3) Differential Calculus with Applications to Physical Sciences and Engineering ...</p> <p>Prerequisite: <del>High-school calculus and a score of 67% or higher in Principles of Mathematics 12</del></p> <p><b>Action:</b> Change prerequisite requirement. <b>Rationale:</b> Currently, the non honours, single-term first-year UBC differential-calculus courses MATH 100, 102, 104, 180, and 184 (“CA1” for short) require a score of 67% or higher in BC Principles of Math 12 (“PM12”) or equivalent. The first three CA1 courses are taken by students who have completed a calculus course in high school, and the last two by those who have not. The PM12 grade for BC students has been the blended grade computed as 60% school grade and 40% provincial exam. This proposal to strengthen the prerequisite arises from two concerns: (1) Historical data given in the attached Table 1 show that Year-1 students with PM12 grades between 67% and 79% are at high risk of failing a CA1 course. The risk is especially high, around 50% overall, for students with a grade between 67% and 72%. These at-risk students will, under the proposed new prerequisite, be given an assessment test and if necessary be placed into MATH 110, a new course designed specifically for students with a poor high-school mathematics background. Ultimately, MATH 110 reaches the same level as the CA1 courses but in two terms instead of one, with the extra time being used for a review of necessary high-school material. Note that the number of at-risk students is small in MATH 100, 102, and 104, but relatively high in MATH 180 and 184. (2) BC students will be admitted to UBC in 2009W without having to write the provincial</p>

	<p>exams in their provincially examinable Grade-12 courses, with the exception of English 12. It is expected that most students will present a PM12 grade based purely on their school's evaluation. In Table 2, a comparison of school grades versus provincial-exam grades is given for Year-1 MATH 180 and 184 students in 2007W. The first two blocks of the table show that 83% of students with a grade between 73% and 79% in the provincial exam passed MATH 180 or 184 whereas only 81% of those with a school grade <i>between 80% and 85%</i> passed (note from Table 1 that these 2007W passing percentages are anomalously high). Also, the relatively small number of students with low school grades in the top block of Table 2 means that for at-risk students school grades cannot be used very effectively as predictors of success in CA1. The bottom two blocks of Table 2 show that the average school grade was about 5.5 points higher than the average provincial-exam grade, with the discrepancy greater for students with the lowest PM12 grades. The 7-point difference between options (a) and (b) in the proposed prerequisite is justified by the data in Table 2. In fact, over time as schools have both less incentive to and less data with which to standardize their grades, school grades may become further inflated and the level in option (a) may have to be increased. A 1977 study by George Bluman and Warren Smith (see <a href="http://www.math.ubc.ca/~gupta/BlumanSmith.pdf">www.math.ubc.ca/~gupta/BlumanSmith.pdf</a>) suggests that the current half-letter-grade difference may eventually increase to a full letter grade.</p> <p>A basic skills test administered to all MATH 180 and 184 students in 2007W and 2008W was used to advise students but not to forcibly place them in remedial courses such as MATH 110. This test will be used for option (c) (see below for implementation details). Table 3 gives correlative data for the basic skills test administered in 2007W. Comparison with the top block of Table 2 shows that this test was a much better predictor of student success than PM12 school grades.</p>
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	<p>In summary, the new prerequisite change will more effectively identify at-risk students, especially with provincial exams not required. The vast majority of UBC students are adequately prepared to take and succeed in CA1 courses, but the new process will allow the Mathematics Department to identify those 5% to 10% who are not. Standards in CA1 courses will not be raised as a result of the prerequisite change; rather the change is meant to allow the current standards to be maintained while at the same time improving outcomes for poorly prepared students by directing them into MATH 110.</p> <p><i>Implications and Implementation Details:</i> Table 4 shows that 86% of Year-1 CA1 students in 2007W satisfied option (a) in the proposed prerequisite. The percentage varies considerably by students' degree/faculty. Approximately 93% of 2007W CA1 students were in Year 1, and 99% had a PM12 or equivalent grade on record. The percentage 86% becomes approximately 68% for students in Year 2, 3, or 4, but these percentages will increase somewhat as blended PM12 grades are replaced by school grades. Overall, well over 85% of all CA1 students will satisfy option (a) and be unaffected by this change.</p> <p>Students who do not satisfy the thresholds in options (a) or (b) will be required to initially register in MATH 110 and then take the basic skills test. If they achieve a satisfactory score on the test, they will be required to change their registration to a CA1 course. It is expected that perhaps half of the students who do not satisfy (a) or (b) and initially register in MATH 110 would subsequently be moved to a CA1 course. There will be many more CA1 sections than MATH 110 sections, so it will be relatively easy to move students from MATH 110 to CA1 than vice-versa.</p> <p>The basic skills test will be administered as a paper test. Three sittings are planned — one in early July, one in the week preceding the start of classes in September, and one in the first week</p>
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	<p>of classes. All students will be allowed to write the test. Students who must take the test or choose to do so will be encouraged to take it at the earliest possible sitting. It is expected that a large proportion of students will be able to take the test in one of the first two sittings, before the start of classes. Students will be allowed to take the test only once.</p> <p>Students who satisfy (a) or (b) but choose to take the basic skills test may be allowed to move from a CA1 course to MATH 110, depending on their score on the test. Students who barely meet the thresholds in (a) or (b) will be encouraged to write the test.</p> <p>Overqualified students will be prevented from taking MATH 110. Students will be screened based on their high-school mathematics grades and/or their basic-skills-test score.</p> <p>According to Enrolment Services, the UBC student registration system permits the checking of PM12 or equivalent grades before allowing a student to register into a CA1 course. This capability will be used in the implementation described above.</p> <p>Simon Fraser University (see <a href="http://www.math.sfu.ca/ugrad/calctest">www.math.sfu.ca/ugrad/calctest</a>) has had in place a prerequisite scheme similar to the one proposed here for a few years. SFU students are required to write the SFU Calculus Readiness Test in person in a computer lab. The possibility of synchronizing SFU's test with our own basic skills test, thereby reducing the amount of administrative work for both institutions, is under discussion with SFU.</p> <p><b>Supporting Documents: SCI-08-2-MATH 100</b></p>
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**TABLE 1**  
**CALCULUS-1 STUDENTS IN YEAR 1 WITH A BC PRINCIPLES OF MATHEMATICS 12 (PM12) GRADE**

**MATH 100: Number of students with PM12 grade in given range and percentage who passed**

PM12	2007W		2006W		2005W		2004W		2003W		AVERAGE	
86-100	648	97%	654	98%	527	98%	637	97%	744	94%	642	96%
80-85	99	92%	91	87%	85	81%	84	86%	89	76%	90	85%
73-79	32	84%	31	58%	33	67%	33	85%	34	62%	33	71%
67-72	2	50%	6	50%	5	60%	3	67%	5	60%	4	57%

**MATH 102: Number of students with PM12 grade in given range and percentage who passed**

PM12	2007W		2006W		2005W		2004W		2003W		AVERAGE	
86-100	299	97%	323	93%	346	97%	280	92%	241	93%	298	94%
80-85	46	85%	55	76%	37	78%	37	84%	13	77%	38	80%
73-79	26	85%	18	61%	7	71%	9	78%	2	100%	12	76%
67-72	5	80%	3	100%	0		8	50%	0		3	69%

**MATH 104: Number of students with PM12 grade in given range and percentage who passed**

PM12	2007W		2006W		2005W		2004W		2003W		AVERAGE	
86-100	357	97%	373	96%	328	93%	313	95%	304	97%	335	96%
80-85	90	90%	81	89%	72	75%	75	95%	88	93%	81	89%
73-79	47	96%	44	66%	29	45%	21	71%	35	69%	35	72%
67-72	7	57%	8	88%	7	29%	8	50%	6	50%	7	56%

**MATH 180: Number of students with PM12 grade in given range and percentage who passed**

PM12	2007W		2006W		2005W		2004W		2003W		AVERAGE	
86-100	210	89%	213	87%	272	87%	282	89%	236	86%	243	88%
80-85	72	82%	86	73%	89	67%	85	74%	99	73%	86	74%
73-79	43	67%	45	51%	35	51%	54	63%	51	59%	46	59%
67-72	14	36%	11	55%	21	38%	14	50%	12	50%	14	44%

**MATH 184: Number of students with PM12 grade in given range and percentage who passed**

PM12	2007W		2006W		2005W		2004W		2003W		AVERAGE	
86-100	189	96%	198	93%	234	88%	232	87%	232	88%	217	90%
80-85	97	88%	86	81%	115	68%	119	73%	112	79%	106	77%
73-79	63	76%	69	54%	56	41%	58	48%	82	70%	66	59%
67-72	25	60%	25	60%	16	44%	21	48%	29	48%	23	53%



**TABLE 2**  
**PRINCIPLES OF MATHEMATICS 12 (PM12) SCHOOL GRADES VERSUS**  
**PROVINCIAL-EXAM GRADES FOR MATH 180 AND MATH 184 STUDENTS IN**  
**2007W**

<b>PM12 School Grade</b>	<b>Number</b>	<b>Percentage Passing MATH 180 or MATH 184</b>
86-100	403	90%
80-85	113	81%
73-79	67	67%
67-72	12	75%
50-66	7	29%
<b>Total</b>	<b>602</b>	<b>85%</b>

<b>PM12 Provincial- Exam Grade</b>	<b>Number</b>	<b>Percentage Passing MATH 180 or MATH 184</b>
86-100	250	93%
80-85	129	88%
73-79	109	83%
67-72	68	74%
50-66	45	51%
<b>Total</b>	<b>601</b>	<b>85%</b>

<b>PM12 School Grade</b>	<b>Number</b>	<b>Average PM12 School Grade</b>	<b>Average PM12 Provincial-Exam Grade</b>
86-100	403	91.6	85.3
80-85	113	82.5	77.2
73-79	67	76.4	73.1
67-72	12	69.3	68.6
50-66	7	63.1	63.1
<b>Total</b>	<b>602</b>	<b>87.4</b>	<b>81.8</b>

<b>PM12 Provincial- Exam Grade</b>	<b>Number</b>	<b>Average PM12 Provincial-Exam Grade</b>	<b>Average PM12 School Grade</b>
86-100	250	91.1	91.4
80-85	129	82.3	87.3
73-79	109	76.4	85.2
67-72	68	69.8	81.7
50-66	45	61.3	79.2
<b>Total</b>	<b>601</b>	<b>81.9</b>	<b>87.4</b>





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**TABLE 3**  
**BASIC SKILLS TEST AS PREDICTOR FOR**  
**MATH 180 AND MATH 184 IN 2007W**

Basic Skills Test Score (/30)	Number	Percentage Passing MATH 180 or MATH 184
20-30	470	93%
16-19	182	79%
13-15	69	68%
10-12	37	54%
5-9	13	31%
Total	771	84%

**TABLE 4**  
**PERCENTAGE OF FIRST-YEAR CA1 STUDENTS WITH AT LEAST 80% AND 86%**  
**IN PRINCIPLES OF MATHEMATICS 12 OR EQUIVALENT IN 2007W, BY DEGREE**

Degree	Number	% with $\geq 80\%$ in PM12 or Equivalent	% with $\geq 86\%$ in PM12 or Equivalent
BSC	1168	93%	82%
BA	595	73%	51%
BASC	580	93%	78%
BCOM	324	86%	71%
BSFN	154	73%	44%
BHK	36	83%	53%
BSAG	33	55%	24%
BSF	28	54%	21%
BSCN	13	54%	46%
BSCW	24	63%	29%
All	2955	86%	70%

<p><b>Effective Date for Change:</b> 09WT1 <b>Proposed Calendar Entry:</b></p> <p>MATH 102 (3) Differential Calculus with Applications to Life Sciences ...</p> <p>Prerequisite: <b>High-school calculus and one of (a) a grade of 80% or higher in BC Principles of Mathematics 12 (or equivalent), (b) a score of 73% or higher in the BC provincial examination for Principles of Mathematics 12, or (c) a satisfactory score in the UBC Mathematics Basic Skills Test.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>MATH 102 (3) Differential Calculus with Applications to Life Sciences ...</p> <p>Prerequisite: <del>High-school calculus and a score of 67% or higher in Principles of Mathematics 12</del></p> <p><b>Action:</b> Change prerequisite requirement. <b>Rationale:</b> See rationale for MATH 100 prerequisite change. <b>Supporting Documents:</b> SCI-08-2-MATH102</p>
<p><b>Effective Date for Change:</b> 09WT1 <b>Proposed Calendar Entry:</b></p> <p>MATH 104 (3) Differential Calculus with Applications to Commerce and Social Sciences ...</p> <p>Prerequisite: <b>High-school calculus and one of (a) a grade of 80% or higher in BC Principles of Mathematics 12 (or equivalent), (b) a score of 73% or higher in the BC provincial examination for Principles of Mathematics 12, or (c) a satisfactory score in the UBC Mathematics Basic Skills Test.</b></p>	<p><b>Present Calendar Entry:</b></p> <p>MATH 104 (3) Differential Calculus with Applications to Commerce and Social Sciences ...</p> <p>Prerequisite: <del>High-school calculus and a score of 67% or higher in Principles of Mathematics 12</del></p> <p><b>Action:</b> Change prerequisite requirement. <b>Rationale:</b> See rationale for MATH 100 prerequisite change. <b>Supporting Documents:</b> SCI-08-2-MATH 104</p>

<p><b>Effective Date for Change:</b> 09W T1 <b>Proposed Calendar Entry:</b></p> <p>MATH 180 (4) Differential Calculus With Physical Applications</p> <p>Topics as for Math 100; intended for students with no previous knowledge of Calculus. Please consult the Faculty of Science Credit Exclusion List: <a href="http://www.students.ubc.ca/calendar/index.cfm?tree=12,215,410,414">www.students.ubc.ca/calendar/index.cfm?tree=12,215,410,414</a>. Not for credit for students with AP Calculus AB, AP Calculus BC, or a passing score on the UBC-SFU-UVIC-UNBC Calculus Challenge Examination.</p> <p>Prerequisite: <b>One of (a) a grade of 80% or higher in BC Principles of Mathematics 12 (or equivalent), (b) a score of 73% or higher in the BC provincial examination for Principles of Mathematics 12, or (c) a satisfactory score in the UBC Mathematics Basic Skills Test.</b> [4-0-0]</p>	<p><b>Present Calendar Entry:</b></p> <p>MATH 180 (4) Differential Calculus With Physical Applications</p> <p>Topics as for Math 100; intended for students with no previous knowledge of Calculus. Please consult the Faculty of Science Credit Exclusion List: <a href="http://www.students.ubc.ca/calendar/index.cfm?tree=12,215,410,414">www.students.ubc.ca/calendar/index.cfm?tree=12,215,410,414</a>. Not for credit for students with <del>High School Calculus</del>, AP Calculus AB, AP Calculus BC, or a passing score on the UBC-SFU-UVIC-UNBC Calculus Challenge Examination.</p> <p>Prerequisite: <del>A score of 67% or higher in one of MATH 002, Principles of Mathematics 12</del> [4-0-0]</p> <p><b>Action:</b> Remove statement about high school calculus. Change prerequisite requirement. <b>Rationale:</b> The currently stated prohibition for students with High School Calculus is in fact not enforced by the Mathematics Department. A small portion of students taking this course have seen calculus in high school, but historical data shows a very poor correlation between their high-school calculus grade and their grade in this course. The stated prohibition is being removed for accuracy and to eliminate student queries about it. Students with high-school calculus will continue to be encouraged to take MATH 100, 102, or 104 instead.</p> <p>The proposed change in prerequisite is intended to ensure that students with a high chance of failing the course enroll in more suitable courses. See rationale for MATH 100 prerequisite change.</p> <p><b>Supporting Documents:</b> SCI-08-2-MATH 180</p>
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<p><b>Effective Date for Change:</b> 09W <b>Proposed Calendar Entry:</b></p> <p>MATH 184 (4) Differential Calculus For Social Sciences and Commerce</p> <p>Topics as for Math 104; intended for students with no previous knowledge of Calculus. Please consult the Faculty of Science Credit Exclusion List: www.students.ubc.ca/calendar/index.cfm?tree=12,215,410,414. Not for credit for students with AP Calculus AB, AP Calculus BC, or a passing score on the UBC-SFU-UVIC-UNBC Calculus Challenge Examination Prerequisite: <b>One of (a) a grade of 80% or higher in BC Principles of Mathematics 12 (or equivalent), (b) a score of 73% or higher in the BC provincial examination for Principles of Mathematics 12, or (c) a satisfactory score in the UBC Mathematics Basic Skills Test.</b> [4-0-0]</p>	<p><b>Present Calendar Entry:</b></p> <p>MATH 184 (4) Differential Calculus For Social Sciences and Commerce</p> <p>Topics as for Math 104; intended for students with no previous knowledge of Calculus. Please consult the Faculty of Science Credit Exclusion List: www.students.ubc.ca/calendar/index.cfm?tree=12,215,410,414. Not for credit for students with <del>High School Calculus</del>, AP Calculus AB, AP Calculus BC, or a passing score on the UBC-SFU-UVIC-UNBC Calculus Challenge Examination. Prerequisite: <del>A score of 67% or higher in one of MATH 002, Principles of Mathematics 12</del> [4-0-0]</p> <p><b>Action:</b> Remove statement of ineligibility for students with High School Calculus. Change prerequisite requirement. <b>Rationale:</b> The currently stated prohibition for students with High School Calculus is in fact not enforced by the Mathematics Department. A small portion of students taking this course have seen calculus in high school, but historical data shows a very poor correlation between their high-school calculus grade and their grade in this course. The stated prohibition is being removed for accuracy and to eliminate student queries about it. Students with high-school calculus will continue to be encouraged to take MATH 100, 102, or 104 instead. <b>Supporting Documents:</b> SCI-08-2-MATH 184</p>
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### **Vision Statement (current)**

The University of British Columbia, aspiring to be one of the world's best universities, will prepare students to become exceptional global citizens, promote the values of a civil and sustainable society, and conduct outstanding research to serve the people of British Columbia, Canada, and the world.

### **Vision Statement – proposed**

**The University of British Columbia, as one of the world's leading public universities, is committed to creating an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and inspires outstanding research to serve the people of British Columbia, Canada, and the world.**

### **Mission Statement (current)**

The University of British Columbia will provide its students, faculty, and staff with the best possible resources and conditions for learning and research, and create a working environment dedicated to excellence, equity, and mutual respect. It will cooperate with government, business, industry, and the professions, as well as with other educational institutions and the general community, to discover, disseminate, and apply new knowledge, prepare its students for fulfilling careers, and improve the quality of life through leading –edge research.

The graduates of UBC will have developed strong analytical, problem-solving and critical thinking abilities; they will have excellent research and communication skills; they will be knowledgeable, flexible, and innovative. As responsible members of society, the graduates of UBC will value diversity, work with and for their communities, and be agents for positive change. They will acknowledge their obligations as global citizens, and strive to secure a sustainable and equitable future for all.

### **Mission Statement - proposed**

Rewrite the mission statement as values and commitments, pulling these out of the current mission statement and results of the consultations that have happened since August 2008. (see next section)

## **VALUES**

### *Academic Freedom*

The University is independent and cherishes free inquiry and scholarly responsibility.

### *Advancing and Sharing Knowledge*

The University supports scholarly pursuits that contribute to new knowledge and understanding, and seeks every opportunity to share them broadly.

### *Excellence*

The University, through its students, faculty, staff, and alumni, strives for excellence, and educates students to the highest standards, developing abilities that improve the world.

### *Integrity*

The University acts with integrity, fulfilling promises and ensuring open, respectful relationships.

### *Mutual Respect*

The University values and respects all members of its communities, each of whom makes a contribution to create, strengthen and enrich our diversity.

### *Public Interest*

As a public institution, UBC embodies the highest standards of service and stewardship of resources.



## COMMITMENTS

### *Aboriginal Engagement*

The University engages Aboriginal people in mutually supportive and productive relationships and opportunities, and works to integrate understandings of Aboriginal culture and history.

### *Alumni Engagement*

The University engages its alumni fully in the life of the institution as valued supporters and advocates who contribute to and benefit from connections to each other and to the University.

### *Creating an Exceptional Learning Environment*

The University provides a rich learning experience that develops communication skills, critical thinking and creativity, facilitates social engagement and service, and helps individuals be global citizens.

### *Creating an Exceptional Work Environment*

The University provides a fulfilling environment in which to work, learn, and live; maintains our values of academic freedom, mutual respect, integrity, dignity, and inclusivity; and encourages the open exchange of ideas and opinions.

### *Effective Use of Resources*

The University marshals its financial, human, information and physical assets, and integrates academic, environmental, and societal needs to create a community that models effective stewardship.

### *Excellence in Research*

The University creates and advances new knowledge and understanding, improves the quality of life through the discovery, dissemination and application of research across a wide range of disciplines, and aims to engage all students in primary research.

### *Excellence in Teaching*

The University supports innovative and transformative teaching that actively engages students in building their own learning experience.

### *External Relationships*

The University facilitates opportunities to bring together scholars and the wider community to enhance societal good.

### *Internal Collaboration*

The University promotes connections among faculties and units to create, develop, and share vital initiatives that advance the interests of UBC and its many communities.

### *International Excellence*

The University envisions and strives for robust internationalization, and collaborates and communicates to influence globally.

### *Navigating Cultural Differences*

The University engages in reflection and action to build cross-cultural aptitudes, create a strong sense of inclusion, and enrich our intellectual and social life.

### *Sustainability*

The University explores and exemplifies all aspects of sustainability, from stewardship to dissemination of effective practices.