THE UNIVERSITY OF BRITISH COLUMBIA

March 16, 2010

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

To: Vancouver Senate

From: Senate Curriculum Committee

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

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

As such, the following is recommended to Senate:

Motion: *That the new and changed courses and programs brought forward by the Faculties of Education, Forestry, Graduate Studies(Applied Science, Arts, Education, Land and Food Systems, Medicine, and Science), and Land and Food Systems be approved.*

Respectfully submitted,

Peter Marshall, Chair
Senate Curriculum Committee

THE UNIVERSITY OF BRITISH COLUMBIA

Enrolment Services
Senate and Curriculum Services
2016–1874 East Mall
Vancouver, BC V6T 1Z1
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T: 604-822-9134; F: 604-822-5945

16 March 2010

To: Vancouver Senate

From: Senate Curriculum Committee

Re: **CURRICULUM PROPOSAL FROM THE FACULTY OF EDUCATION**

Attached please find submitted a category 1 curriculum proposal for your consideration.

New Course:
HKIN 472 (3)

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Education **Department: School of Human Kinetics** **Faculty Approval Date: Jan. 14, 2010** **Effective Session W Term 2 Year 2010 for Change**	**Date: March 18, 2010** **Contact Person: David Sanderson** **Phone: 2-4361** **Email: david.sanderson@ubc.ca**
Proposed Calendar Entry: **HKIN 472 (3) Genetic Issues in Sports, Exercise and Human Performance** The scientific, cultural, and ethical issues surrounding the role of genetics in determining human physical performance and the application of molecular biological techniques to sport science. Prerequisite: Third-year standing [3,0]	**URL:** N/A **Present Calendar Entry:** N/A **Type of Action:** Create new course **Rationale:** This new course will augment the selection of upper-level courses available to students. In this course, students will be introduced to the basic concepts of biological inheritance and innate human variation, with an emphasis on the current understanding of the role of genetic variants in determining human physical performance. This will provide the background for discussions of the various social, cultural and ethical issues associated with the perception of genetically-determined “talent” as well as the use of genetics in athlete recruitment, training, and performance enhancement (legitimate and doping).

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16 March 2010

To: Vancouver Senate

From: Senate Curriculum Committee

Re: **CURRICULUM PROPOSALS FROM THE FACULTY OF FORESTRY**

Attached please find submitted category 1 curriculum proposals for your consideration.

New Course:
FRST 270 (3)

New Specializations in the B.S.F. Program:
Integrated Resource Management
Community and Aboriginal Forestry

New Minor:
Minor in Commerce within the Specialization in Community and Aboriginal Forestry

UBC Curriculum Proposal Form
Change to Courses

Category 1

Faculty: Forestry **Department:** Forest Sciences **Faculty Approval Date:** May 7, 2009 **Effective Session for Change:** 2010W	**Date:** May 4, 2009 **Contact Person:** Peter Marshall **Phone:** (604) 822-4918 **Email:** Peter.Marshall@ubc.ca
Proposed Calendar Entry: **FRST 270 (3) Community Forests and Community Forestry** Community forests and community forestry throughout the world, with special attention to participation by aboriginal peoples; emphasis is on forms of governance, public participation, and adaptive learning. [3-0-0]	**URL:** **Present Calendar Entry:** None **Type of Action:** Create new course. **Rationale:** This is a key course in the new specialization in aboriginal and community forestry being proposed for the Forest Resources Management major within the BSF degree program. There is currently no similar course offered on campus. **Documentation:** Forestry-2009-1

UBC Curriculum Proposal Form
Change to Program
Category: 1

Category: (1)

Faculty: Forestry **Department: Forest Resources Management** **Faculty Approval Date:** **Effective Session for Change:** 2010W	**Date: April 9, 2009** **Contact Person: John Nelson** **Phone: 2-3902** **Email:** John.Nelson@ubc.ca
Proposed Calendar Entry: Introduction Program Approval and Advising Admission Academic Regulations Forest Resources Management Major (Specialization in Integrated Resource Management) Forest Resources Management Major	**Type of Action:** Rename an existing program as a specialization within the existing Forest Resources Management Major. The existing program will be called the Forest Resources Management Major (Specialization in Integrated Resource Management). Also add a new specialization in the BSF program called Community and Aboriginal Forestry. **Rationale:** The Canadian Federation of Professional Forester Associations (CFPFA) has undertaken a major effort to reassess the accreditation goals and standards at each university and we what we have done follows their approach. We feel that every graduate does not need to follow exactly the same course path and there should be the flexibility for students to emphasize certain aspects of forest management in their education. We retain the core requirements of the CFPFA and introduce flexibility to the program through specialization-specific and unrestricted electives that allow students to concentrate on certain aspects of forest management. These specializations contain the core of the forest resources management major while allowing students to specialize in integrated resource management, community and aboriginal forestry or international forestry. **URL:** http://www.students.ubc.ca/calendar/index.cfm?tree=12,203,328,0 **Present Calendar Entry:** Introduction Program Approval and Advising Admission Academic Regulations Forest Resources Management Major Forest Resources Management (Specialization in International Forestry) Forest Operations Major

(Specialization in Community and Aboriginal Forestry) Forest Resources Management Major (Specialization in International Forestry) Forest Operations Major	
	URL: http://www.students.ubc.ca/calendar/index.cfm?tree=12,203,328,164
Proposed Calendar Entry: The Bachelor of Science in Forestry (BSF) program is designed to prepare students for entry into the profession of forestry. Education within the Faculty can also serve as a foundation for entry into other professions such as teaching, law, engineering, and biology. The BSF Forest Resources Management Major has three specializations that allow students to concentrate on integrated resource management, community and aboriginal forestry (including a Minor in Commerce) or international forestry. The BSF Forest Operations Major has two options that allow students to specialize in Harvest Planning and Engineering or Commerce (Minor in Commerce).	**Present Calendar Entry:** The Bachelor of Science in Forestry program is designed to prepare students for entry into the profession of forestry. Education within the Faculty can also serve as a foundation for entry into other professions such as teaching, law, engineering, and biology.
Students are encouraged to declare their specializations as soon as possible, but they must do so by the beginning of second year.	
The BSF program contains several integrated courses and labs requiring fieldwork and three extra-sessional field courses. Students must be prepared to participate in field trips off-campus (including some weekends and evenings) and to pay the extra costs associated with these field trips. It is each student's responsibility to make the necessary arrangements regarding employment, extra-curricular activities, personal commitments, and so on, so that they are able to participate fully in required field trips.	The B.S.F. program contains several integrated courses and labs requiring fieldwork and ~~two~~ extra-sessional field courses. Students must be prepared to participate in field trips off-campus (including some weekends and evenings) and to pay the extra costs associated with these field trips. It is each student's responsibility to make the necessary arrangements regarding employment, extra-curricular activities, personal commitments, and so on, so that they are able to participate fully in required field trips.
With the changing demands on foresters and the importance of articulating positions on social/forestry issues, orally and in writing, emphasis will be placed on developing students' communication skills. Opportunities to develop written and oral skills are integrated into courses throughout the program.	With the changing demands on foresters and the importance of articulating positions on social/forestry issues, orally and in writing, emphasis will be placed on developing students' communication skills. Opportunities to develop written and oral skills ~~will be~~ integrated into courses throughout the program
	URL: http://www.students.ubc.ca/calendar/index.cfm?tree=12,203,328,169
The Faculty of Forestry > *Bachelor of Science in Forestry (B.S.F.)* > ***Forest Resources Management Major*** > ***(Specialization in Integrated Resource Management)***	> Bachelor of Science in Forestry (B.S.F.) > **Forest Resources Management Major** **Present Calendar Entry:**

Proposed Calendar Entry:

The Forest Resources Management Major (Specialization in Integrated Resource Management) is designed to educate adaptable professionals with a comprehensive understanding of the discipline, an ability to acquire specific knowledge and skills as required, and the confidence to play a decision-making role in a wide variety of resource management situations. Graduates, after appropriate work experience and examination, may be eligible for registration as professional foresters in various Canadian provinces.

Students are provided with an introduction to the biological, physical, and social sciences upon which forest resource management is based, and a working knowledge of the characteristics of forest resources, their interactions, and the ways in which they can be managed to yield a socially desirable mix of goods and services. Students will also gain an understanding of the political and socio-economic environment in which forestry is practiced; and an appreciation for the historical and ethical foundations of the profession. Throughout the program, emphasis is placed on encouraging communication skills, both oral and written, creative thinking, critical analysis, and professional pride.

For students entering the Faculty from secondary school, the program consists of 127 credits taken over four years. For those students entering the Faculty from first-year university (or its equivalent), or with a two-year Forestry Technical Diploma from a BC college or institute of technology, the program consists of approximately 95 credits, normally taken over a three-year period.

Students Entering from Secondary School

First Year	
ENGL 100-level	3
BIOL 111 and 121[1]	6
CHEM 121 (111) or PHYS 101 (100)[2]	4/3
ECON 101	3
FRST 100	3
FRST 232[3]	3
MATH 100 or 102 or 104 or 190[4]	3
APBI 200	3

The Forest Resources Management major is designed to educate adaptable professionals with a comprehensive understanding of the discipline, an ability to acquire specific knowledge and skills as required, and the confidence to play a decision-making role in a wide variety of resource management situations. Graduates, after appropriate work experience and examination, may be eligible for registration as professional foresters in various Canadian provinces.

Students are provided with an introduction to the biological, physical, and social sciences upon which forest resource management is based, and a working knowledge of the characteristics of forest resources, their interactions, and the ways in which they can be managed to yield a socially desirable mix of goods and services. Students will also gain an understanding of the political and socio-economic environment in which forestry is practised; and an appreciation for the historical and ethical foundations of the profession. Throughout the program, emphasis is placed on encouraging communication skills, both oral and written, creative thinking, critical analysis, and professional pride.

~~For students entering the Faculty from secondary school, the program consists of 126 or 127 credits. For those students entering the Faculty from first-year university (or its equivalent), the program consists of a minimum of 94 credits, normally taken over a three-year period. For students entering the Faculty of Forestry with a two-year Forestry Technical Diploma from a BC college or institute of technology, the program consists of 94 or 95 credits, normally taken over a three-year period.~~

Students Entering from Secondary School

First Year	
ENGL 100-level	3
BIOL 111 and 121[1]	6
CHEM 121 (111) or PHYS 101 (100)[2]	4/3
ECON 101	3
FRST 100	3
FRST 232[3]	3
MATH 100 or 102 or 104 or 190[4]	3
SOIL 200	3

Electives	3	Electives	3
Total Credits	30/31	Total Credits	30/31
FOPR 162 immediately preceding second year	2	FOPR 162 immediately ~~following first~~ year	2
Second Year		**Second Year**	
CONS 200	3	CONS 200	3
FOPR 262	3	FOPR 262	3
FRST 200	3	FRST 200	3
FRST 201	3	FRST 201	3
FRST 210	3	FRST 210	3
FRST 211	3	FRST 211	3
FRST 231	3	FRST 231	3
FRST 239	3	FRST 239	3
Electives	6	Electives	6
Total Credits	30	Total Credits	30
FRST 351 immediately preceding third year	2	FRST 351 immediately preceding third year	2
Third Year		**Third Year**	
FRST 305	3	FRST 305	3
FRST 307	3	FRST 307	3
FRST 318	3	FRST 318	3
FRST 320	3	FRST 320	3
FRST 339	3	FRST 339	3
FRST 385	3	FRST 385	3
FRST 386	3	FRST 386	3
FRST 395	3	FRST 395	3
WOOD 461	3	WOOD 461	3
Specialization-specific elective[5]	3	Restricted elective[5]	3
Total Credits	30	Total Credits	30
FRST 452 immediately following third year	2	FRST 452 immediately following third year	2
Fourth Year		**Fourth Year**	
FRST 415	3	FRST 415	3
FRST 424	10	FRST 424	10
FRST 497	2	FRST 497	2
WOOD 465	3	WOOD 465	3
Specialization-specific electives[5]	6	Restricted electives[5]	6
Electives	6	Electives	6

Total Credits	30

[1] Students with Biology 12 should replace BIOL 111 with 3 credits of electives.

[2] CHEM 111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

[3] Students with strong computing skills, especially in the use of spreadsheets, can replace FRST 232 with 3 credits of electives, upon approval by the program director.

[4] Students who had less than a C+ average in Math 12 must take the non-credit MATH 099 prior to mathematics courses. Students may enrol in MATH 180 (4 credits) or MATH 110 (6 credits) instead of MATH 100 or 102 (3 credits), but the credit difference cannot be applied towards program electives.

[5] Specialization-specific electives are to be chosen from the Specialization-specific Elective pool: APBI 244/GEOG 204 (3); CONS 340 (3), CONS 370 (3), 481 (3); FOPR 362 (3); FRST 302 (3), 404 (4), 427 (3), 439 (3), 443 (3), 491 (3); WOOD 474 (2), 492 (3).

Transfer Students

Students entering from first-year university or equivalent must complete all required first and second year courses that were not completed at their previous institution(s) before entering third year. The third and fourth year requirements are the same as listed above.

BC Forestry Technology Graduates

Students entering after graduating with a two-year Forestry Technical Diploma from an approved BC college or institute of technology will receive a one-year exemption. They will enter a special second year program before proceeding to the regular program in Years Three and Four.

Second Year	
ENGL 100-level	3
BIOL 111 and 121[1]	6
CHEM 111 or 121 or PHYS 100 or 101[2]	4/3
ECON 101	3
MATH 100 or 102 or 104 or 190[3]	3
FRST 200	3

Total Credits	30

[1] Students with Biology 12 should replace BIOL 111 with 3 credits of electives.

[2] CHEM 111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

[3] Students with strong computing skills, especially in the use of spreadsheets, can replace FRST 232 with 3 credits of electives, upon approval by the program director.

[4] Students who had less than a C+ average in Math 12 must take the non-credit MATH 099 prior to mathematics courses. Students may enrol in MATH 180 (4 credits) instead of MATH 100 or 102 (3 credits), but the credit difference cannot be applied towards program electives requirement.

[5] Restricted electives are to be chosen from the Restricted Elective pool: AGRO 244/GEOG 204 (3); CONS 340 (3), CONS 370 (3), 481 (3); FOPR 362 (3); FRST 302 (3), 404 (4), 427 (3), 439 (3), 443 (3), 491 (3); WOOD 474 (2), 492 (3).

Transfer Students

Students entering from first-year university or equivalent must complete all required first and second year courses that were not completed at their previous institution(s) before entering third year. The third and fourth year requirements are the same as listed above.

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Students entering after graduating with a two-year Forestry Technical Diploma from an approved BC college or institute of technology will receive a one-year exemption. They will enter a special second year program before proceeding to the regular program in Years Three and Four.

Second Year	
ENGL 100-level	3
BIOL 111 and 121[1]	6
CHEM 111 or 121 or PHYS 100 or 101[2]	4/3
ECON 101	3
MATH 100 or 102 or 104 or 190[3]	3
FRST 200	3
FRST 210	3

FRST 210	3
FRST 231	3
APBI 200	3
Total Credits	30/31
FRST 351 immediately preceding third year	2
Third Year	
CONS 200	3
FRST 305	3
FRST 318	3
FRST 339	3
FRST 385	3
FRST 386	3
FRST 395	3
WOOD 461	3
Elective	3
Specialization-specific Elective[4]	3
Total Credits	30
FRST 452 immediately following third year	2
Fourth Year	
FRST 415	3
FRST 424	10
FRST 497	2
WOOD 465	3
Specialization-specific electives[4]	6
Electives	6
Total Credits	30

[1] Students with Biology 12 should replace BIOL 111 with 3 credits of electives.

[2] CHEM 111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

[3] Students who had less than a C+ average in Math 12 must take the non-credit MATH 098 prior to mathematics courses. Students may enrol in MATH 180 (4 credits) or MATH 190 (6 credits) instead of MATH 100 or 102 (3 credits), but the credit difference cannot be applied towards program electives.

FRST 231	3
~~SOIL 200~~	3
Total Credits	30/31
FRST 351 immediately preceding third year	2
Third Year	
CONS 200	3
FRST 305	3
FRST 318	3
FRST 339	3
FRST 385	3
FRST 386	3
FRST 395	3
WOOD 461	3
Elective	3
Restricted Elective[4]	3
Total Credits	30
FRST 452 immediately following third year	2
Fourth Year	
FRST 415	3
FRST 424	10
FRST 497	2
WOOD 465	3
Restricted electives[4]	6
Electives	6
Total Credits	30

[1] Students with Biology 12 should replace BIOL 111 with 3 credits of electives.

[2] CHEM 111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

[3] Students who had less than a C+ average in Math 12 must take the non-credit MATH 098 prior to mathematics courses. Students may enrol in MATH 180 (4 credits) instead of MATH 100 or 102 (3 credits), but the credit difference cannot be applied towards program electives.

[4] Specialization-specific electives are to be chosen from the following: APBI 244/GEOG 204 (3); CONS 340 (3), 370 (3), 481 (3); FOPR 362 (3); FRST 302 (3), 404 (4), 427 (3), 439 (3), 443 (3), 491 (3); WOOD 474 (2), 492 (3).

Proposed Calendar Entry:

The Faculty of Forestry > *Bachelor of Science in Forestry (B.S.F.)* > ***Forest Resources Management Major > (Specialization in Community and Aboriginal Forestry)***

The Forest Resources Management Major (Specialization in Community and Aboriginal Forestry) is designed to educate students to be adaptable professionals with a comprehensive understanding of the discipline of forest management, an ability to acquire specific knowledge and skills as required, and the confidence to play a decision-making role in a wide variety of resource management situations with an emphasis on community forestry and working for aboriginal peoples. Graduates, after appropriate work experience and examination, may be eligible for registration as professional foresters in various Canadian provinces.

Students are provided with an introduction to the biological, physical, and social sciences upon which forest resource management is based, and a working knowledge of the characteristics of forest resources, their interactions, and the ways in which they can be managed to yield a socially desirable mix of goods and services. Students will also gain an understanding of the political and socio-economic environment in which forestry is practiced; and an appreciation for the historical and ethical foundations of the profession. Throughout the program, emphasis is placed on encouraging communication skills, both oral and written, creative thinking, critical analysis, and professional pride.

For students entering the Faculty from secondary school, the program consists of 130 credits, normally taken over four years. For those students entering the Faculty from first-year university (or its equivalent) or with a two-year Forestry Technical Diploma from a BC college or institute of technology, the program consists of 98 credits normally taken over a three-year period.

Students Entering from Secondary School

First Year

[4] Restricted electives are to be chosen from the following: AGRO 244/GEOG 204 (3); CONS 340 (3), 370 (3), 481 (3); FOPR 362 (3); FRST 302 (3), 404 (4), 427 (3), 439 (3), 443 (3), 491 (3); WOOD 474 (2), 492 (3).

Present Calendar Entry:

None

Type of Action:

Introduce a new specialization within the existing Forest Resources Management Major. The specialization in Community and Aboriginal Forestry includes 3- and 4-year programs to accommodate high school students, transfer students and forestry technical school graduates. There is also an option to take a Minor in Commerce within this specialization.

Rationale:

The Canadian Federation of Professional Forester Associations (CFPFA) has undertaken a major effort to reassess the accreditation goals and standards at each university and we what we have done follows their approach. We feel that every graduate does not need to follow exactly the same course path and there should be the flexibility for students to emphasize certain aspects of forest management in their education. We retain the core requirements of the CFPFA and introduce flexibility to the program through specialization-specific and unrestricted electives that allow students to concentrate on certain aspects of forest management. This specialization contains the core of the forest resources management major while allowing students to specialize in community and aboriginal forestry, including the option for a Minor in Commerce.

ENGL 100-level	3
BIOL 111 and 121[1]	6
CHEM 121 (111) or PHYS 101 (100)[2]	4/3
ECON 101	3
FRST 100	3
MATH 100 or 102 or 104 or 190[4]	3
Electives	9
Total Credits	30/31
FOPR 162 immediately preceding second year	2
Second Year	
CONS 200	3
FRST 270	3
FRST 200	3
FRST 201	3
FRST 210	3
FRST 211	3
FRST 231	3
FRST 239	3
Specialization-specific Elective[5]	3
Elective	3
Total Credits	30
FRST 351 immediately preceding third year	2
Third Year	
COMM 457	3
CONS 370	3
FRST 305	3
FRST 307	3
FRST 318	3
FRST 320	3
FRST 385	3
FRST 395	3
WOOD 461	3
Specialization-specific Elective[5]	3
Total Credits	30
FRST 452 immediately following third year	2
Fourth Year	
COMM 329	3
FRST 415	3
FRST 424	10
FRST 444	3
FRST 497	2
WOOD 465	3
Specialization-specific Electives[5]	9
Total Credits	33

[1] Students with Biology 12 should replace BIOL 111 with 3 credits of electives.

[2] CHEM 111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

[3] Students with strong computing skills, especially in the use of spreadsheets, can replace FRST 232 with 3 credits of electives, upon approval by the program director.

[4.] Students who had less than a C+ average in Math 12 must take the non-credit MATH 099 prior to mathematics courses. Students may enrol in MATH 180 (4 credits) or MATH 110 (6 credits) instead of MATH 100 or 102 (3 credits), but the credit difference cannot be applied towards program electives.

[5] Specialization-specific electives are to be chosen from the following:
ANTH 220 (3), ANTH 222 (3), CONS 340 (3), CONS 481 (3), CONS 491 (3), ECON 374 (3), FNSP 200 (6), FRST 439 (3), FRST 470 (3) FRST 490 (3), FRST 491 (3), GEOG 310 (3), LAW 200 (3), LAW 395 (3), POLI 406 (3), SOCI 360 (3), WOOD 474 (2)

Transfer Students

Students entering from first-year university or equivalent must complete all required first and second year courses that were not completed at their previous institution(s) before entering third year. The third and fourth year requirements are the same as listed above.

BC Forestry Technology Graduates

Students entering after graduating with a two-year Forestry Technical Diploma from an approved BC college or institute of technology will receive a one-year exemption. They will enter a special second year program before proceeding to the regular program in Years Three and Four.

Second Year	
ENGL 100-level	3
BIOL 111 and 121[1]	6
CHEM 111 or 121 or PHYS 100 or 101[2]	4/3
ECON 101	3
MATH 100 or 102 or 104 or 190[3]	3
FRST 200	3
FRST 210	3

FRST 270	3
Elective	3
Total Credits	30/31
FRST 351 immediately preceding third year	2
Third Year	
COMM 457	3
CONS 370	3
FRST 231	
FRST 305	3
FRST 318	3
FRST 385	3
FRST 395	3
WOOD 461	3
Specialization-specific Elective[4]	3
Total Credits	30
FRST 452 immediately following third year	2
Fourth Year	
COMM 329	3
FRST 415	3
FRST 424	10
FRST 444	3
FRST 497	2
WOOD 465	3
Specialization-specific Electives[4]	9
Total Credits	33

[1] Students with Biology 12 should replace BIOL 111 with 3 credits of electives.

[2] CHEM 111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

[3] Students who had less than a C+ average in Math 12 must take the non-credit MATH 098 prior to mathematics courses. Students may enroll in MATH 180 (4 credits) or MATH 110 (6 credits) instead of MATH 100 or 102 (3 credits), but the credit difference cannot be applied towards program electives.

[4] Specialization-specific electives are to be chosen from the following: ANTH 220 (3), ANTH 222 (3), CONS 340 (3), CONS 481 (3), CONS 491 (3), ECON 374 (3), FNSP 200 (6), FRST 439 (3), FRST 470 (3), FRST 490 (4), FRST 491 (3), GEOG 310 (3), LAW 200 (3), LAW 395 (3), POLI 406 (3), SOCI 360 (3), WOOD 474 (2).

UBC Curriculum Proposal Form
Change to Program

Category 1

Faculty: Forestry **Departments:** Forest Resources Management and Forest Sciences **Faculty Approval Date:** Nov. 3, 2009 **Effective Session for Change:** 2010W	**Date:** Oct. 27, 2009 **Contact Person:** Peter Marshall **Phone:** (604) 822-4918 **Email:** Peter.Marshall@ubc.ca
Proposed Calendar Entry: *The Faculty of Forestry* > *Bachelor of Science in Forestry (B.S.F.)* > ***Forest Resources Management Major > (Specialization in Community and Aboriginal Forestry) > Minor in Commerce*** Students who desire a stronger foundation in business may consider the Minor in Commerce. Upon successful completion of this minor program, the notation "Minor in Commerce" will be placed on the student's transcript. Enrolment in this program is limited. Applications for admission can be obtained from the Faculty of Forestry Student Services and must be submitted by May 15. For an application to be considered, the student must be eligible for at least third-year standing in the Faculty (BSF Forest Resources Management Major) with a cumulative average of at least 68% in the previous two years. Completion of ECON 101 (or ECON 310) and ECON 102 (or ECON 311) plus MATH 100 or 102 or 104 before applying. Meeting the stated minimum requirement does not guarantee admission into the Minor. Students may require an additional term to complete the Minor in Commerce, although it is intended to be completed over two years. For students entering the Faculty from secondary school, the program consists of 136 credits taken over four years. For those students entering the Faculty from first-year university (or its equivalent), or with a two-year Forestry Technical Diploma from a BC college or institute of technology, the program consists of 107 credits normally taken over a three-year period. **Students Entering from Secondary School** **First Year** ENGL 100-level 3	**URL:** **Present Calendar Entry:** None **Type of Action:** New Minor. **Rationale:** This minor is an important component of the new specialization in Community and Aboriginal Forestry. The Faculty of Forestry's First Nations Council of Advisors and the broader forestry community (both aboriginal and non-aboriginal) wished to see a business option within this new specialization. This proposed minor matches with the two other commerce minors that Forestry programs have and has the support of the Faculty of Commerce and Business Administration.

BIOL 111 and 121[1]	6
CHEM 121 (111) or PHYS 101 (100)[2]	4/3
ECON 101	3
ECON 102	3
FRST 100	3
MATH 100 or 102 or 104[3]	3
Electives	6
Total Credits	30/31
FOPR 162 immediately preceding second year	2
Second Year	
CONS 200	3
FRST 270	3
FRST 200	3
FRST 201	3
FRST 210	3
FRST 211	3
FRST 231	3
FRST 239	3
Specialization-specific Elective[4]	3
Elective	3
Total Credits	30
FRST 351 immediately preceding third year	2
Third Year	
COMM 329	3
COMM 398 or 458	3
COMM 457	3
COMM 465	3
CONS 370	3
FRST 305	3
FRST 307	3
FRST 318	3
FRST 320	3
FRST 385	3
FRST 395	3
WOOD 461	3
Total Credits	36
FRST 452 immediately following third year	2
Fourth Year	
COMM 473	3
COMM 493	3
FRST 415	3
FRST 424	10

FRST 444	3
FRST 497	2
WOOD 465	3
Specialization-specific Electives[4]	6
Total Credits	33

[1] Students with Biology 12 should replace BIOL 111 with 3 credits of electives.

[2] CHEM 111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

[3.] Students who had less than a C+ average in Math 12 must take the non-credit MATH 099 prior to mathematics courses. Students may enroll in MATH 180 (4 credits) or MATH 190 (6 credits) instead of MATH 100, 102 or 190 (3 credits), but the credit difference cannot be applied towards program elective requirements.

[4] Specialization-specific electives are to be chosen from the following: ANTH 220 (3), ANTH 222 (3), CONS 340 (3), CONS 481 (3), CONS 491 (3), ECON 374 (3), FNSP 200 (6), FRST 439 (3), FRST 470 (3), FRST 490 (3), FRST 491 (3), GEOG 310 (3), LAW 200 (3), LAW 395 (3), POLI 406 (3), SOCI 360 (3), WOOD 474 (2).

Transfer Students

Students entering from first-year university or equivalent must complete all required first and second year courses that were not completed at their previous institution(s) before entering third year. The third and fourth year requirements are the same as listed above.

BC Forestry Technology Graduates

Students entering after graduating with a two-year Forestry Technical Diploma from an approved BC college or institute of technology will receive a one-year exemption. They will enter a special second year program before proceeding to the regular program in Years Three and Four.

Second Year	
ENGL 100-level	3
BIOL 111 and 121[1]	6
CHEM 111 or 121 or PHYS 100 or 101[2]	4/3
ECON 101	3
ECON 102	3

MATH 100 or 102 or 104[3]	3
FRST 200	3
FRST 210	3
FRST 270	3
Total Credits	30/31
Third Year	
COMM 329	3
COMM 398 OR 458	3
COMM 457	3
COMM 465	3
CONS 200	3
CONS 370	3
FRST 231	3
FRST 305	3
FRST 318	3
FRST 385	3
FRST 395	3
WOOD 461	3
Total Credits	33
FRST 452 immediately following third year	2
Fourth Year	
COMM 473	3
COMM 493	3
FRST 415	3
FRST 424	10
FRST 444	3
FRST 497	2
WOOD 465	3
Specilaization-specific Electives[4]	9
Total Credits	36

[1] Students with Biology 12 should replace BIOL 111 with 3 credits of electives.

[2] CHEM 111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

[3] Students who had less than a C+ average in Math 12 must take the non-credit MATH 099 prior to mathematics courses. Students may enroll in MATH 180 (4 credits) or MATH 110 (6 credits) instead of MATH 100, 102 or 190 (3 credits), but the credit difference cannot be applied towards program electives .

[4] Specialization-specific electives are to be chosen from the following: ANTH 220 (3), ANTH 222 (3), CONS 340 (3), CONS 481 (3), CONS 491 (3), ECON 374 (3),

FNSP 200 (6), FRST 439 (3), FRST 470 (3), FRST 490 (4), FRST 491 (3), GEOG 310 (3), LAW 200 (3), LAW 395 (3), POLI 406 (3), SOCI 360 (3), WOOD 474 (2).	

THE UNIVERSITY OF BRITISH COLUMBIA

Enrolment Services
Senate and Curriculum Services
2016–1874 East Mall
Vancouver, BC V6T 1Z1
lindsey.lipovsky@ubc.ca
T: 604-822-9134; F: 604-822-5945

16 March 2010

To: Vancouver Senate

From: Senate Curriculum Committee

Re: **GRADUATE PROPOSALS**

Attached please find submitted category 1 graduate curriculum proposals for your consideration.

Faculty of Applied Science
New Courses:
EECE 542 (3)
EECE 584 (6)
EECE 585 (3)
MECH 527 (3)
MECH 529 (3)

Revised Course:
MECH 575 (1-3)d

Faculty of Arts
New Courses:
LIBR 553 (3)
SOWK 504 (3)
SOWK 550 (3)
SOWK 551 (3)
SOWK 555 (3)

Program Change:
M.S.W. Program Requirements

Faculty of Education
New Course:
HKIN 571 (3)

Faculty of Land and Food Systems
New Courses:
SOIL 515 (3)
SOIL 516 (3)
SOIL 518 (3)

…/continued

Faculty of Medicine
New Courses:
OBST 507 (3)
SPPH 555 (3)

Program Change:
Anatomy and Cellular Biology Suspension of Admission

Faculty of Science
New Courses:
MATH 546 (3)
MATH 548 (3)
MATH 555 (3)
MATH 556 (3)

Revised Course:
MATH 503 (3)

THE UNIVERSITY OF BRITISH COLUMBIA

FACULTY OF APPLIED SCIENCE (ENGINEERING)

APSC / UBC Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Applied Science **Department: Electrical and Computer Engineering** **Faculty Approval Date: Nov. 5, 2009** **Effective Session: September 2010**	**Date: September 22, 2009** **Contact Person: Nick Jaeger** **Phone: 2-5673** **Email: nickj@ece.ubc.ca**
Effective Date: **Proposed Calendar Entry:** **EECE 542 (3) Computer-Integrated Surgery** Computer-integrated surgery systems such as point-based and intensity-based registration, targeting error estimation, surgical interface design, surgical robotics, and virtual reality, learned through hands-on applications and problems. [3-0-0].	**Present Calendar Entry:** **Type of Action:** Create new course **Rationale:** This course is designed to introduce the advanced concepts and underlying technologies of computer-integrated surgery (CIS) systems. **Category 1**

Faculty: Applied Science **Department: EECE** **Faculty Approval Date: November 5, 2009** **Effective Session: September 2010**	**Date: 2009/09/14** **Contact Person: Lukas Chrostowski** **Phone: 822-8507** **Email: lukasc@ece.ubc.ca**
EECE: Graduate Course Change(s)	
Proposed Calendar Entry: **EECE 584 (6) NANOPHOTONICS FABRICATION** Design, fabricate, and test a photonic integrated circuit (PIC) using silicon-on-insulator (SOI) technology. Modelling and design of optical components.	**Present Calendar Entry:** None **Type of Action:** Create new course **Rationale:** Silicon photonics and optical interconnects have been identified as a key technology by the semiconductor industry (ITRS) for further performance improvements in CMOS technology. It is critical for students to learn how to design devices using this technology to be competitive in future integrated electronics-photonics applications. Specifically, silicon waveguides using SOI substrate allow for the fabrication of extremely compact photonic circuits based on standard CMOS processing. The goal of student design projects is to simulate, design and characterize an optical nanophotonic device. **Category** 1 ***Previously offered in 2008-09 and 2009-10 as EECE 571U Nanophotonics Fabrication***

Proposed Calendar Entry: **EECE 585 (3) ELECTROMAGNETIC COMPATIBILITY.** History of electromagnetic compatibility; standards and regulations; component models; radiated emissions; conducted emissions; transmission lines and cross-talk; shielding; electrostatic discharge; EMC system design. [2-3*-0]	**Present Calendar Entry:** None **Type of Action:** Create new course **Rationale:** Electromagnetic compatibility is a topic of considerable and growing interest to Canadian industry but is not addressed by any existing UBC course. **Category 1**

Faculty: Applied Science **Department: Mechanical Engineering** **Faculty Approval Date: November 5, 2009** **Effective Date: September 2010**	**Submission Date: September 29, 2009** **Contact Person: Dr. Gary Schajer** **Phone: 604-822-6004** **Email: schajer@mech.ubc.ca**
MECH: Graduate Course Change(s)	
Proposed Calendar Entry: **MECH 527 (3) ADVANCED MECHATRONICS. Quasi-static approximations, modulation and demodulation, reversal, reciprocity, motor transformation, stiffness method, spatial filtering, Maxwell stress tensor, guarding, control limitations. Prerequisite: MECH 421 or equivalent. [3-0-0]**	**URL:**http://www.students.ubc.ca/calendar/courses.cfm?code=MECH **Present Calendar Entry:** N/A **Type of Action:** Create new course **Rationale:** This advanced course provides students with in-depth understanding of modeling, analysis, and design of mechatronics components and systems. The course supports the studies of the students enrolled in the Mechatronics option within the Mechanical Engineering Department. The course has been taught as a "Special Advanced Course" MECH 550Q for three years with an average enrollment of 10. Based on this experience, it is now intended to make the course into a permanent offering. **Category 1**

Proposed Calendar Entry: **MECH 529 (3) MODELING OF DYNAMIC SYSTEMS. Advanced modeling of mechanical, electrical, fluid, thermal and multi-domain systems; inter-domain analogies; analytical models in time and frequency domains; modeling tools; response analysis; digital simulation; practical project. Prerequisite: Prior undergraduate coursework in dynamics, vibration or electrical circuits. [3-0-0]**	**URL:**http://www.students.ubc.ca/calendar/courses.cfm?code=MECH **Present Calendar Entry**: N/A. **Type of Action:** Create new course **Rationale:** This advanced course provides students with in-depth understanding of modeling of dynamic systems. The course has been taught as a "Special Advanced Course" MECH 550 for three years. Based on this experience, it is now intended to make the course into a permanent offering. **Category 1**

Faculty of Applied Science:

Engineering Curriculum Report

Faculty: Applied Science **Department: Mechanical Engineering** **Faculty Approval Date: November 5, 2009** **Effective Date: September 2010**	**Submission Date: September 29, 2009** **Contact Person: Dr. Gary Schajer** **Phone: 604-822-6004** **Email: schajer@mech.ubc.ca**
MECH: Graduate Course Change(s)	
Proposed Calendar Entry: MECH 575 (1-3) **D** SPECIAL TOPICS IN **MECHANICAL ENGINEERING. Lectures within a broad sub-specialization of Mechanical Engineering.**	**URL:**http://www.students.ubc.ca/calendar/courses.cfm?code=MECH **Present Calendar Entry:** MECH 575 (1-3) ~~C~~ SPECIAL TOPICS IN ~~HEAT AND MASS TRANSFER~~. *(no descriptive text)* **Type of Action:** 1) Revise title 2) Add description 3) Change C to D in crediting. **Rationale:** The title change is made to make Special Topics courses available to all Mechanical Engineering students, not just those studying Heat and Mass Transfer. A course description is added to conform to the practice for all other Mechanical Engineering courses. Special Topics courses are aimed at the needs of modest number of students with specialized study interests, for which appropriate courses likely exist at other major universities, but not otherwise at UBC. The attached course outline illustrates an example course format. **Category 1**

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Arts **Department: School of Library, Archival and Information Studies** **Faculty Approval Date: October 6, 2009** **Effective Session Winter Term 2** **Year 2009 for Change**	**Date: April 14, 2009** **Contact Person: Mary Sue Stephenson** **Phone: 604-822-6392** **Email: mss@interchange.ubc.ca**
Proposed Calendar Entry: LIBR 553 (3) Understanding Information Users in Diverse Environments	**URL:** **Present Calendar Entry:** **Type of Action:** Create new course **Rationale:** Human information behavior is an important area of both research and application in the domain of Library and Information Studies. This course provides students with an understanding of the theories and models of information behavior; an understanding of information seeking and use in a variety of settings, including everyday life, health care, academics, and private and public organizations; and an understanding of how individuals and groups engage in information behaviours in these varied settings and for diverse purposes. This course has been taught successfully as the topics course *LIBR 559A: Understanding Information Users in Diverse Environments.* It is being changed to a stand-alone course since the School anticipates it will be offered on a regular basis in the future.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Arts **Department: Social Work** **Faculty Approval Date: Oct. 6, 2009** **Effective Session Winter Term 2** **Year for Change 2009-10**	**Date: May 9, 2009** **Contact Person: Paule McNicoll** **Phone: 604-822-2977** **Email: paule.mcnicoll@ubc.ca**
Proposed Calendar Entry: **SOWK 504 (3) First Nations Social Issues**	**URL:** **Present Calendar Entry:** None. **Type of Action:** Create new course. **Rationale:** This new course is designed to provide the theoretical and historical foundation for Social Work practice with First Nations at the Master's level.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Arts **Department: Social Work** **Faculty Approval Date: October 6, 2009** **Effective Session ____ Term 1___** **Year_2010-11 for Change**	**Date: May 11, 2009** **Contact Person: Paule McNicoll** **Phone :604-822-2977** **Email:paule.mcnicoll@ubc.ca**
Proposed Calendar Entry: **SOWK 550 (3) Social Work and Social Justice**	**URL:** **Present Calendar Entry:** None. **Type of Action:** Create new course. **Rationale:** This new course stems from the vision statement of the School and will be the starting point for the new curriculum. Other courses in the MSW will flow from the concepts embedded in this course. It is designed to provide the theoretical and historical foundation for other courses in the programme.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: ARTS **Department: School of Social Work** **Faculty Approval Date: October 6, 2009** **Effective Session _____ Term __** **Year_2010__ for Change**	**Date: May 8, 2009** **Contact Person: Paule McNicoll** **Phone: 604-822-2977** **Email: paule.mcnicoll@ubc.ca**
Proposed Calendar Entry: **SOWK 551 (3)** HEALTH AND SOCIAL CARE PRAXIS	**URL:** N/A **Present Calendar Entry:** None. **Type of Action:** Create new course **Rationale:** This course provides a conceptual basis for students interested in focusing on health, mental health, addictions, trauma and disabilities across the lifespan.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Arts **Department: School of Social Work** **Faculty Approval Date: October 6, 2009** **Effective Session: Winter Terms 1 & 2** **Year for Change: 2010 - 11**	**Date: May 10, 2009** **Contact Person: Paule McNicoll** **Phone: 604 – 822 - 2977** **Email: paule.mcnicoll@ubc.ca**
Proposed Calendar Entry: **SOWK 555 (3) Advanced Integrative Seminar** Advanced development of professional judgment, critical reflection, and integration of theory, practice, research, policy.	**URL:** **Present Calendar Entry:** None. **Type of Action:** Create new course. **Rationale:** Course developed as part of revised Master of Social Work Program

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Arts **Department: School of Social Work** **Faculty Approval Date: October 6, 2009** **Effective Session _Winter___ Term _1__ Year_2010-11__ for Change**	**Date: June 26, 2009** **Contact Person: Paule McNicoll** **Phone: 604-822-2977** **Email: paule.mcnicoll@ubc.ca**
Proposed Calendar Entry: Master of Social Work There are two entry points into the M.S.W. Students with a B.S.W. can apply for entry into the one-year, **30**-credit M.S.W. Students with a baccalaureate degree other than a B.S.W. can apply for entry into the two-year, 60-credit M.S.W. program. Admission Requirements General admission requirements for the one-year M.S.W. include a Bachelor of Social Work (B.S.W.) degree or equivalent and at least 3 credits of coursework in statistics. Other factors considered are: competitive academic standing (GPA), study plan, professional social work experience, and letters of reference. General admission requirements for the two-year M.S.W. include a baccalaureate degree in social sciences or humanities or closely related professional field. Applicants are required to have completed at least 3 credits of coursework in both statistics and research methodology. For example, SOWK 320 Introduction to Social Work Research would meet the research methodology prerequisite. Other factors considered are: competitive academic standing (GPA), study plan, **social service experience**, and letters of reference. Program Requirements • Students with a B.S.W. can directly enter the second year of the program. • The first year of study requires the completion of **24** credits of	**URL: http://www.students.ubc.ca/calendar/index.cfm?tree=12,204,828,1229** **Present Calendar Entry:** **Master of Social Work** There are two entry points into the M.S.W. Students with a B.S.W. can apply for entry into the one-year, ~~33~~-credit M.S.W. Students with a baccalaureate degree other than a B.S.W. can apply for entry into the two-year, 60-credit M.S.W. program. **Admission Requirements** General admission requirements for the one-year M.S.W. include a Bachelor of Social Work (B.S.W.) degree or equivalent and at least 3 credits of coursework in statistics. Other factors considered are: competitive academic standing (GPA), study plan, professional social work experience, and letters of reference. General admission requirements for the two-year M.S.W. include a baccalaureate degree in social sciences or humanities or closely related professional field. Applicants are required to have completed at least 3 credits of coursework in both statistics and research methodology. For example, SOWK 320 Introduction to Social Work Research would meet the research methodology prerequisite. Other factors considered are: competitive academic standing (GPA), study plan, ~~professional social work experience~~, and letters of reference. **Program Requirements** • Students with a B.S.W. can directly enter the second year of the program. • The first year of study requires the

coursework, plus a 6-credit practicum. • The second year requires completion of **30 credits** • **Students must take the course on social justice (SOWK 550), a minimum of two courses in research methods and a practicum.** • Students can choose between **an integrative seminar course (SOWK 555)** and **a** thesis. • **Students elect one of the following areas of focus for the remainder of the credits: children and families, health and social care, or international/social development.** • **A maximum of 9 credits of courses may be taken outside of the school.** • Part-time study is available.	completion of ~~21~~ credits of coursework, plus a 6-credit practicum. • The second year requires completion of ~~33 credits, with a minimum of 6 credits to be completed in each of the following areas: theoretical foundations and policy, social work practice, research, and elective coursework.~~ • Students can choose between ~~a graduating essay~~ and thesis. ~~The 3-credit graduating essay option is for those students intending to specialize in direct social work practice, with an emphasis on the integration of theory and practice. A 6-credit practicum is required. The 6-credit thesis option requires completion of original research, as well as the completion of a 3-credit practicum.~~ • ~~Courses can be taken outside the School to a maximum of 12 credits.~~ • Part-time study is available. **Type of Action:** 1. The number of credits in the second year will change from 33 to 30 2. One factor considered for admission in the two-year MSW changes from professional social work experience to social service experience 3. The number of credits to be completed in the first year will change from 21 to 24. 4. Different organization of courses with the creation of a mandatory course on social justice and of three areas of focus: children and families, health and social care, or international/social development 5. Abolition of the graduate essay. **Rationale:** 1. The lowering of the number of credits in the second year conforms to the current standards in Canadian Schools of Social Work. 2. Applicants for the two-year MSW program are very unlikely to have professional

	social work experience as they do not have a prior professional social work degree. However, many will have social service experience. 3. The increase in the number of credits in the first year is a requirement for accreditation. 4. The mandatory course is consistent with the vision of the School and the goals of the Master's program. The areas of focus correspond to the needs of the community and the strengths of the faculty. 5. This change is in response to a recommendation of the 2007 internal study of the School.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Education **Department: School of Human Kinetics** **Faculty Approval Date: Oct. 21, 2009** **Effective Session ____ Term 2___** **Year for Change: 2010-2011**	**Date:** **Contact Person: Brian Wilson** **Phone: 604-822-3884** **Email: brian.wilson@ubc.ca**
Proposed Calendar Entry: **HKIN 571 (3) Qualitative Methods in Sport, Leisure, and Health Studies** **Theoretical, methodological, and ethical debates about and approaches to qualitative methods; issues in and approaches to qualitative inquiry. [3-0].**	**URL:** **Present Calendar Entry:** n/a **Type of Action:** Create new graduate course **Rationale:** This course was designed for Human Kinetics graduate students and others interested in developing expertise in qualitative methods, while exploring issues in and approaches to qualitative inquiry prominent within the 'sociology of sport and leisure' and 'health studies' fields. While students from around campus are encouraged to take the class, the course is designed with Human Kinetics graduate students working in our socio-cultural and psycho-social areas in mind because these students tend to share an interest in issues related to sport, leisure and health. Having a common qualitative methods class for these students – students who in many cases plan to utilize qualitative methods for their thesis research and are advised by faculty who specialize in qualitative methods – is also intended to support a collaborative research culture among graduate students within the socio-cultural and psycho-social areas within the School.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Land and Food Systems **Department:** **Faculty Approval Date: July 13, 2009** **Effective Session _W___ Term __1_ Year_2009__ for Change**	**Date: April 28, 2009** **Contact Person: Les Lavkulich** **Phone:** **Email: lml@interchange.ubc.ca**
Proposed Calendar Entry: **SOIL 515 (3) - Integrated Watershed Management** Methods of watershed evaluation, land-water interactions, key aspects of hydrology, water quality and aquatic biota, land use impacts on water resources, community involvement, and integration of multiple land use activities and their cumulative impacts. Credits will not be given for both SOIL 515 and RMES 515.	**URL:** https://courses.students.ubc.ca/cs/main?pname=subjarea&tname=subjareas&req=3&dept=RMES&course=515 **Present Calendar Entry:** **RMES 515 (3) - 201- Integrated Watershed Management** Methods of watershed evaluation, land-water interactions, key aspects of hydrology, water quality and aquatic biota, land use impacts on water resources, community involvement, and integration of multiple land use activities and their cumulative impacts. **Type of Action:** • Create new course • Cross list with RMES 515 **Rationale:** • This is a web-based course. The cross listing would enable a differentiation between students in RMES (CFIS) and students in SOIL (LFS)
Proposed Calendar Entry: **SOIL 516 (3) - Urban Watershed Management** Urban land use impacts on water resources with a focus on impervious surfaces, storm-water management, non-point sources of	**URL:** https://courses.students.ubc.ca/cs/main?pname=subjarea&tname=subjareas&req=3&dept=RMES&course=516 **Present Calendar Entry:** **RMES 516 (3) - 101 Urban Watershed Management** Urban land use impacts on water resources with a focus on impervious surfaces, storm-water management, non-point sources of pollution, cumulative effects, water quality,

pollution, cumulative effects, water quality, rehabilitation of urban streams and application of best management practices. Prior completion of RMES 515 strongly recommended. Credits will not be given for both SOIL 516 and RMES 516.	rehabilitation of urban streams and application of best management practices. Prior completion of RMES 515 strongly recommended. **Type of Action:** • Create new course • Cross list with RMES 516 **Rationale:** • This is a web-based course. The cross listing would enable a differentiation between students in RMES (CFIS) and students in SOIL (LFS)
SOIL 518 (3) - Water in International Development Key water issues associated with international development: global water demand, scarcity, efficiency of use, water as a commodity, biophysical and policy aspects of water management, water and health, land use impact, water harvesting, improved irrigation, and pollution prevention. Credits will not be given for both SOIL 518 and RMES 518.	**URL:** https://courses.students.ubc.ca/cs/main?pname=subjarea&tname=subjareas&req=3&dept=RMES&course=518 **Present Calendar Entry:** **RMES 518 (3) - 201 Water in International Development** Key water issues associated with international development: global water demand, scarcity, efficiency of use, water as a commodity, biophysical and policy aspects of water management, water and health, land use impact, water harvesting, improved irrigation, and pollution prevention. **Type of Action:** • Create new course • Cross list with RMES 518 **Rationale:** • This is a web-based course. The cross listing would enable a differentiation between students in RMES (CFIS) and students in SOIL (LFS)

THE UNIVERSITY OF BRITISH COLUMBIA
UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Medicine **Department: Obstetrics and Gynecology** **Faculty Approval Date: August 7, 2009** **Effective Session: Term 1 Year 2009/10**	**Date: July 20, 2009** **Contact Person: Dr. Patricia Janssen** **Phone: (604) 875.2424, ext 5415** **Email: pjanssen@ubc.ca**
Proposed Calendar Entry: **OBST 507 (3) Perinatal Epidemiology** Indicators of maternal/newborn well-being across population subgroups, changing trends in obstetrical intervention, perinatal morbidity and the analysis of perinatal data. Equivalence: SPPH 537 Corequisite: OBST 502 or 504	**URL:** **Present Calendar Entry:** **Type of Action:** Create new course. Cross-list with SPPH 537. **Rationale:** The Reproductive Health Sciences Program in the Department of Obstetrics and Gynecology has identified that this course provides key content for their graduate students that is not available in current offerings within the Department of Obstetrics. They wish to cross-list it to improve the visibility of this course to their students and to encourage them to enroll.

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1) New Course

Faculty: Medicine **Department:** School of Population and Public Health **Faculty Approval Date: 19 June 2009** **Effective Session:** Term 1, Year 2010/2011	**Date:** June 11, 2009 **Contact Person:** Dr. Ian Pike **Phone:** 604-875-3425 **Email:** ipike@cw.bc.ca
Proposed Calendar Entry: SPPH 555 (3): Principles and Practices of Injury Prevention Injury epidemiology; surveillance; development, implementation and evaluation techniques of preventive strategies; determinants of health; social marketing; injury policy; evidence-based prevention strategies; utilization of injury datasets	**Present Calendar Entry:** N/A **Type of Action:** New Course **Rationale:** Unintentional and intentional injury is the leading cause of death for Canadians aged 1 to 44 years. Injuries cost Canadians $14.7 billion annually in health care costs and lost productivity, ranking third, after cardiovascular and musculoskeletal diseases and before cancer. Like diseases, however, most injuries follow a distinct pattern and are, therefore, predictable and preventable. Injuries are the result of many complex factors; hence any effort to prevent or reduce the severity of injuries must involve many sectors, disciplines and approaches. This course is essential for students interested in injury prevention research, prevention programming, and health care delivery. It will provide students with a comprehensive understanding of the theory and practice of injury prevention; provincial, national and international sources of injury data; implementation of injury surveillance in health care and community settings; and the essential tools needed to develop and implement effective injury prevention programs using a population health approach. Given the magnitude of injury, a critical need exists for injury researchers and practitioners. This course will complete SPPH students' learning around significant burdens of health facing the Canadian population and strategies to reduce these burdens. It will help ensure that UBC's SPPH students are seen as leaders in public health practice with a comprehensive education and practical prevention tools.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Medicine **Department: Department of Cellular & Physiological Sciences** **Faculty Approval Date: June 13, 2008** **Effective Session __winter__ Term _1__ Year2009__ for Change**	**Date: Dec 8, 2008** **Contact Person: Tim O'Connor** **Phone: 604-822-9759** **Email:** jimo@interchange.ubc.ca
Proposed Calendar Entry: **Not accepting applications for admission. Applicants interested in study of anatomy, cell biology and physiology are encouraged to apply to the Graduate Program in Cell and Developmental Biology, an Interdisciplinary Program in the College for Interdisciplinary Studies (CfIS).** Degrees Offered: Ph.D., M.Sc. Members Professors J. Church, J. T. Emerman, I. R. Nabi, C. C. G. Naus, W. K. Ovalle, A. W. Vogl, J. Weinberg. Associate Professors T. O'Connor, C. Roskelley, T. M. Underhill, V. Viau. Assistant Professors D.W. Allan, S. X. Bamji, S. M. Clee, K. Haas, C. J. R. Loewen, H. Moukhles, G. Tanentzapf. Program Overview The Division of Anatomy and Cell Biology offers opportunities and facilities for advanced studies in anatomy, cellular biology, and neurobiology leading to the Master of Science	URL: http://www.students.ubc.ca/calendar/index.cfm?tree=12,204,828,1111 Degrees Offered: Ph.D., M.Sc. Members Professors J. Church, J. T. Emerman, I. R. Nabi, C. C. G. Naus, W. K. Ovalle, A. W. Vogl, J. Weinberg. Associate Professors T. O'Connor, C. Roskelley, T. M. Underhill, V. Viau. Assistant Professors D.W. Allan, S. X. Bamji, S. M. Clee, K. Haas, C. J. R. Loewen, H. Moukhles, G. Tanentzapf. Program Overview The Division of Anatomy and Cell Biology offers opportunities and facilities for advanced studies in anatomy, cellular biology, and neurobiology leading to the Master of Science and Doctor of Philosophy. Members of the division undertake research programs in a wide range of basic and clinically relevant areas. Special research areas include cell and developmental biology, neurobiology, oncology, immunology, muscular dystrophy, muscle and membrane biophysics, and morphological aspects of cell structure and function at the light and electron microscopic

and Doctor of Philosophy. Members of the division undertake research programs in a wide range of basic and clinically relevant areas. Special research areas include cell and developmental biology, neurobiology, oncology, immunology, muscular dystrophy, muscle and membrane biophysics, and morphological aspects of cell structure and function at the light and electron microscopic levels. The division is well equipped and has the following: transmission electron microscopes, fluorescence and photo-microscopes, confocal microscope, video image analysis, freeze-fracturing equipment, ultramicrotomes, molecular biology facilities and equipment, tissue culture facilities, spectro-photometric and radioisotope equipment, electrophysiological instrumentation, laser diffraction equipment, and ultracentrifuges. Doctor of Philosophy Admission Requirements Applicants to the Ph.D. program are expected to meet the admission requirements of the Faculty of Graduate Studies. Transfer from the M.Sc. to the Ph.D. program is permitted under regulations set by the Faculty of Graduate Studies. Program Requirements Appropriate coursework will be selected in consultation with the student's supervisory committee. All doctoral students are required to successfully complete a comprehensive examination. The major requirement for the Ph.D. is completion of a research dissertation meeting the Faculty of Graduate Studies requirements. Master of Science Admission Requirements Students admitted to the M.Sc. degree program will normally possess a bachelor's degree in anatomy, cellular biology, or a related area, and must meet the general admission requirements	levels. The division is well equipped and has the following: transmission electron microscopes, fluorescence and photo-microscopes, confocal microscope, video image analysis, freeze-fracturing equipment, ultramicrotomes, molecular biology facilities and equipment, tissue culture facilities, spectro-photometric and radioisotope equipment, electrophysiological instrumentation, laser diffraction equipment, and ultracentrifuges. Doctor of Philosophy Admission Requirements Applicants to the Ph.D. program are expected to meet the admission requirements of the Faculty of Graduate Studies. Transfer from the M.Sc. to the Ph.D. program is permitted under regulations set by the Faculty of Graduate Studies. Program Requirements Appropriate coursework will be selected in consultation with the student's supervisory committee. All doctoral students are required to successfully complete a comprehensive examination. The major requirement for the Ph.D. is completion of a research dissertation meeting the Faculty of Graduate Studies requirements. Master of Science Admission Requirements Students admitted to the M.Sc. degree program will normally possess a bachelor's degree in anatomy, cellular biology, or a related area, and must meet the general admission requirements for master's degree programs set by the Faculty of Graduate Studies. Program Requirements The M.Sc. program requires completion of a minimum of 30 credits, including a 12-credit research thesis and at least 18 credits of coursework. Coursework may be selected in

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for master's degree programs set by the Faculty of Graduate Studies. Program Requirements The M.Sc. program requires completion of a minimum of 30 credits, including a 12-credit research thesis and at least 18 credits of coursework. Coursework may be selected in consultation with the student's supervisory committee. Contact Information Department of Cellular and Physiological Sciences 1365F-2350 Health Sciences Mall Vancouver, BC, Canada V6T 1Z3 Tel: 604.822.2671 Fax: 604.822.2316 Email: alanj@interchange.ubc.ca Web: www.cellphys.ubc.ca Alan Jay, Graduate Secretary	consultation with the student's supervisory committee. Contact Information Department of Cellular and Physiological Sciences 1365F-2350 Health Sciences Mall Vancouver, BC, Canada V6T 1Z3 Tel: 604.822.2671 Fax: 604.822.2316 Email: alanj@interchange.ubc.ca Web: www.cellphys.ubc.ca Alan Jay, Graduate Secretary Type of Action: Suspend admission to Ph.D. and M.Sc. graduate programs Rationale: As part of the academic reorganization taking place within the Faculty of Medicine, new interdisciplinary graduate programs with impressive course offerings and multi-faculty membership have been created. Our Department has been instrumental in developing these programs, in training their graduate students, and in teaching their courses. These new programs are the destinations of choice for incoming graduate students, which is a testament to their success. In recognition of this evolution the Department of Cellular and Physiological Sciences, formerly the Departments of Physiology and Anatomy/Cell Biology, voted unanimously at the Faculty retreat of Friday, June 13, 2008, to place the ANCB graduate program into hibernation; the program is not accepting new students.

Effective Date for Change: 10W Term 1 **Proposed Calendar Entry:** **MATH 546 (3) Continuous Time Stochastic Processes** **Prerequisites: MATH 544, MATH 545.**	**Present Calendar Entry:** None **Action:** Create new course. **Rationale:** Stochastic analysis (including Ito calculus and its applications) arises in financial mathematics, stochastic control, and filtering theory in engineering, as well as models in biological science and genetics. In addition to students studying probability, MATH 546 (Continuous Time Stochastic Processes) will be of interest to mathematically strong students from Applied Science and Finance, as well as students in Mathematics interested in partial differential equations, mathematical physics, and certain fields of applied mathematics. MATH 546 will cover fundamental tools for the study of random phenomena which vary with time. Students will develop intuition regarding randomness and how it is modelled mathematically; they will learn how stochastic processes in general, and stochastic differential equations in particular, can be used as models in science and what kinds of information can be gleaned from them. The course will build on the existing two-semester sequence MATH 544/545. **Supporting Documents: SCI-09-1-MATH 546**

Effective Date for Change: 10W Term 1 **Proposed Calendar Entry:** **MATH 548 (3) Discrete Random Processes** **Prerequisites: MATH 544, MATH 545.**	**Present Calendar Entry:** None **Action:** Create new course. **Rationale:** Discrete probability is a very active topic in modern probability theory. While lower-level probability courses typically glimpse topics such as random walks and random graphs, Markov chains, and ergodic theory, the proposed MATH 548 (Discrete Random Processes) will cover them in greater depth. In particular, it will provide students with essential prerequisites required to understand the active research seminar of the department's Probability group and to conduct research in discrete probability. Without such a course, students must acquire the required background “by osmosis”, which is difficult and inefficient. The topics covered in MATH 548 will provide an in-depth introduction to some of the advanced tools and techniques used at the forefront of research in discrete probability. In addition, students will be exposed to recent results from the research literature. The course will build on the existing two-semester sequence MATH 544/545. **Supporting Documents: SCI-09-1-MATH 548**

Effective Date for Change: 10W Term 1 Proposed Calendar Change: **MATH 555 (3) Compressed Sensing**	**Present Calendar Entry:** **None.** **Action:** Create new course. **Rationale:** Compressed Sensing is a new, important research area. The mathematical theory has matured recently; however there are still many open research problems. In addition, the subject is intimately connected to other disciplines such as computer science, electrical engineering, earth and ocean sciences, medical imaging, and astronomy. The use of compressed sensing will be more widespread in the coming years. Making the regular graduate course MATH 555 will increase its visibility and will make this course attractive to a large number of graduate students from several disciplines. Creating this course will lessen the load on the overtaxed course number 605, “Topics in Applied Mathematics”, and will signal our department's dedication to a timely and current course offering in an active area of applied mathematics. **Supporting Documents: SCI-09-1-MATH 555**

Effective Date for Change: 10W Term 1 **Proposed Calendar Entry:** **MATH 556 (3) Industrial Mathematical Modeling**	**Present Calendar Entry:** None. **Action:** Create new course. **Rationale:** MATH 556 will survey the development and application of some advanced applied mathematical techniques that are used in modeling physical, biological, or industrial, applications. The theoretical mathematical material developed in this course relating to the stability, dynamics, and asymptotics, of nonlinear ordinary and partial differential equation systems are all illustrated for a wide range of "case studies problems" originating from recent research articles in theoretical engineering or physics journals. The interdisciplinary nature of the material, together with the genuine interlacing of advanced theory and real-world application, provides a strong framework for graduate students to undertake advanced mathematical modeling and analysis in their chosen area of application. A course in Industrial Mathematical Modeling has been offered as a Topics course every other year since 2000; attracting a range of graduate students in applied mathematics, theoretical engineering, and physics in each offering. Creating this course will lessen the load on the overtaxed course number 605, "Topics in Applied Mathematics", and will signal our department's dedication to a timely and current course offering in an active area of applied mathematics. **Supporting Documents: SCI-09-1-MATH 556**

Contact: Dr. Bill Ramey
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Faculty Approval Date: November 4, 2009

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MATHEMATICS

Effective Date for Change: 10W Term 1

Proposed Calendar Entry:

MATH 503 (3) **Discrete Mathematics**

Present Calendar Entry:

MATH 503 (3) ~~Algebraic Structures I~~

Action: Delete current course and replace with new course.

Rationale: Discrete mathematics is an important field within mathematics, which has many applications outside of mathematics. The discrete mathematics group at UBC has grown in recent years, and will teach introductory graduate level courses on a regular basis in the future. Because of interest outside of mathematics the proposed course has a large potential audience.

Algebraic Structures I has not been taught for at least fourteen years. There is no conceivable use for this title to stay on the books: the needs of the Algebra group at UBC are met by the courses MATH 501/502 Algebra I/II, and MATH 534/535 Lie Theory I/II. Discrete mathematics will be sufficiently represented by the proposed new title "Discrete Mathematics".

Supporting Documents: SCI-09-1-MATH 503

THE UNIVERSITY OF BRITISH COLUMBIA

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16 March 2010

To: Vancouver Senate

From: Senate Curriculum Committee

Re: **CURRICULUM PROPOSALS FROM THE FACULTY OF LAND AND FOOD SYSTEMS**

Attached please find submitted category 1 curriculum proposals for your consideration.

New Course:
APBI 100 (3)

New Minor:
Minor in Commerce

UBC Curriculum Proposal Form
Change to Course or Program

Category: (1)

Faculty: Land and Food Systems **Department:** **Faculty Approval Date: Nov. 6, 2009** **Effective Session winter Term _1_** **Year 2010 for Change**	**Date: October 22, 2009** **Contact Person: Dr. Maja Krzic** **Phone: 604-822-0252** **Email: Maja.Krzic@ubc.ca**
Proposed Calendar Entry: **APBI 100 (3) Soil and the Global Environment** Soil as the base of the Earth's ecosystem pyramid. The interconnection between soil, climate change and human activity, the carbon cycle, water resources, food security, food safety, and biofuel production. Strategies for sustaining soil resources.	**Present Calendar Entry:** N/A (new course) **Type of Action:** Create new course **Rationale:** This course is intended primarily for students with limited science background, who wish to improve their understanding of current global environmental issues to achieve active citizenship. It will be appropriate for students in the Faculty of Arts fulfilling their science requirements and may serve as an elective for students in the Faculties of Land and Food Systems, Forestry, Science, or visiting students. This course will be valuable for students who are interested in exploring the connection between soil, environment, and society. This course provides an overview of core principles in soil and environmental science and challenges students to integrate knowledge to understand key issues related to soils and the global environment. See attached course outline.

UBC Curriculum Proposal Form
Change to Course or Program

Category: 1

Faculty: Land and Food Systems **Department:** **Faculty Approval Date:** July 13, 2009 **Effective Session __W__ Term __2_ Year_09/10__ for Change**	**Date:** April 28, 2009 **Contact Person:** Jim Vercammen **Phone:** 822-5667 or 822-8475 **Email:** james.vercammen@ubc.ca
Proposed Calendar Entry: **Minor in Commerce** Students wanting a foundation in business management are encouraged to consider the Minor in Commerce. Enrolment in this program is strictly limited. An application for admission can be obtained from Student Services, Faculty of Land and Food Systems (http://www.landfood.ubc.ca/). The completed form must be returned by May 15th. At the time of application, students must be eligible for third-year standing in the Faculty of Land and Food Systems with a cumulative average of at least 68% in the previous two years. Meeting the stated minimum requirements does not guarantee admission into the Minor. Due to the fixed scheduling requirements of the Dietetics Major, it is typically not possible for students in this major to do a Commerce minor. Applicants must have successfully completed one of MATH 100, 102, 104, 110, 120, 180, or 184 and both of ECON 310 and 311 (or 101 and 102). The program will consist of COMM 329 (3), COMM 457 (3), COMM 465 (3), COMM 473 (3), COMM 493 (3), and one of COMM 398 (3) or COMM 458 (3) for a total of 18 credits. The Commerce minor is intended to be completed over two winter sessions. Upon successful completion of this program, the notation “Minor in Commerce” will be placed on the student’s transcript.	**URL:** **Present Calendar Entry:** **Type of Action:** Add Commerce minor **Rationale:** A sizeable number of students in the Faculty of Land and Food Systems (LFS) would be interested in achieving a foundation in business management through the Commerce minor program. The idea of a Commerce minor program for LFS is not unique because several other UBC Faculties currently offer this program to their students (e.g., Applied Science, Science, Forestry). A sizeable fraction of LFS students have enough flexibility in their restricted and unrestricted electives to consider the Commerce minor. Students pursuing a FNH degree with a major in Food Market Analysis major are particularly well suited to pursue a Commerce minor because these students typically take several Commerce courses as part of their set of restricted electives.