



15 May 2013

To: Vancouver Senate

From: Senate Curriculum Committee

RE: **a) May 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 new courses, changed courses, new minor, and program changes brought forward by the Faculties of Arts, Commerce and Business Administration, Graduate Studies (Applied Science, Commerce and Business Administration, Science), Land and Food Systems, and Medicine be approved.”*

Respectfully submitted,

Dr. Peter Marshall, Chair

Senate Curriculum Committee



23 April 2013

To: Vancouver Senate

From: Vancouver Senate Curriculum Committee

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

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The Senate Curriculum Committee has reviewed the attached Category 1 proposals from the Faculty of Arts and is pleased to submit them for your consideration.

**New Courses**

CRWR 209 (3)

CRWR 230 (3)

CRWR 309 (3-12)d



THE UNIVERSITY OF BRITISH COLUMBIA

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

**Category: 1**

<p><b>Faculty:</b> Arts  <b>Department:</b> Creative Writing  <b>Faculty Approval Date:</b> June 1 2012  <b>Effective Session W Term 2 Year 2012</b></p>	<p><b>Date:</b> June 1 2012  <b>Contact Person:</b> Steven Galloway  <b>Phone:</b> 822-6273  <b>Email:</b> steven.galloway@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b>  CRWR 209 (3) Introduction to Writing Fiction</p> <p>An exploration of the writing of fiction, focusing on how a writer employs the technical elements of the craft of fiction.</p> <p>Manuscript submission not required for admission.</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CRWR">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CRWR</a></p> <p><b>Type of Action:</b>  New Course</p> <p><b>Rationale for Proposed Change:</b></p> <p>This course will address the demand from students for instruction in writing fiction, one of the main areas of Creative Writing. It will generate and foster interest in our program as a whole and allow us to give our potential BFA Majors added skills. We currently offer 200 level courses in Screenwriting, Writing for Stage and Radio, Writing for Children, Writing for Graphic Forms and Writing for New Media. The lack of an introductory fiction writing course is a glaring omission in our course offerings.</p> <p><input type="checkbox"/> <b>Not available for Cr/D/F grading.</b>  (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p><b>Pass/Fail or <input type="checkbox"/> grading</b>      <b>Honours/Pass/Fail</b></p> <p><input type="checkbox"/> <b>grading</b>  (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>



THE UNIVERSITY OF BRITISH COLUMBIA

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

**Category: 1**

<p><b>Faculty:</b> Arts  <b>Department:</b> Creative Writing  <b>Faculty Approval Date:</b> June 1 2012  <b>Effective Session W Term 2 Year 2012</b></p>	<p><b>Date:</b> June 1 2012  <b>Contact Person:</b> Steven Galloway  <b>Phone:</b> 822-6273  <b>Email:</b> steven.galloway@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b>  CRWR 230 (3) Introduction to Writing for Comedic Forms</p> <p>An examination of and practice in creative writing in comedic forms, including stand-up, sketch, film, new media and text.</p> <p>Manuscript submission not required for admission.</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CRWR">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CRWR</a></p> <p><b>Type of Action:</b>  New Course</p> <p><b>Rationale for Proposed Change:</b></p> <p>Writing for Comedic Forms is one of the most vibrant and student requested areas of Creative Writing, and an area that we have not to date offered instruction in. We feel that this course will generate interest in our program as a whole and allow us to give our potential BFA Majors added skills to bring into their writing.</p> <p><input type="checkbox"/> <b>Not available for Cr/D/F grading.</b>  (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p><b>Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail</b>  <input type="checkbox"/> <b>grading</b>  (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>



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

**Category: 1**

<p><b>Faculty:</b> Arts  <b>Department:</b> Creative Writing  <b>Faculty Approval Date:</b> June 1 2012  <b>Effective Session W Term 2 Year 2012</b></p>	<p><b>Date:</b> June 1 2012  <b>Contact Person:</b> Steven Galloway  <b>Phone:</b> 822-6273  <b>Email:</b> steven.galloway@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b>  CRWR 309 (3-12)d Intermediate Writing Fiction</p> <p>An exploration of the writing of fiction, focusing on how a writer employs the technical elements of the craft of fiction. Manuscript submission not required for admission.</p> <p>Prerequisite courses: CRWR 209</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CRWR">http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CRWR</a></p> <p><b>Type of Action:</b>  Create New Course</p> <p><b>Rationale for Proposed Change:</b></p> <p>A weekly one hour (estimated) online module combined with a weekly two hour workshop. Each week the student will complete an online module covering a specific component of writing fiction, culminating in an assigned writing project. They will then take part in a small-group workshop where their writing will be evaluated using the workshop model practiced in all upper-level Creative Writing classes.</p> <p>The workshop is at the core of creative writing instruction at UBC and other universities worldwide, and consists of a collaborative peer review process in which regularly submitted creative work from each student forms the curriculum of the course. Through the peer review process, students learn how to become more effective writers, editors and critical thinkers. This process is naturally learner-centered, collaborative and requires a high degree of student engagement.</p> <p>The online modules will consist of commissioned interviews with prominent fiction writers, video clips of deceased or</p>



unavailable writers, lecture material from the course instructor and interactive questioning of the student. UBC Creative Writing has considerable experience in online learning, having pioneered Canada's largest and most successful Optional Residency MFA. We are working with Arts IT and other University Organizations on the specific delivery mechanisms for these modules and anticipate having them completed (pending course approval) well in advance of offering this course for the first time.

We wish to design the course as a 3-12 class, intending the class to be taken in 3 credit installments which may be repeated. The increased flexibility that comes with being able to offer applied arts workshop courses between 3 and 12 credits will allow Creative Writing to accommodate students' needs in the various genres. The Program will be able to continue to offer breadth in multi-genres for students who are focusing upon this multi-pronged approach to their academic pursuits and also to offer depth for students who wish to focus upon only one or two particular genres. The 3 credit versions of the genres allow students to pursue depth, breadth, or a combination of both, which will allow students to expand their knowledge base as well as prepare for their writing careers.

Throughout our program, we intend for the flow of non-BFA students to progress from CRWR 200 (Introduction to Creative Writing—a course that covers all of the forms we teach) into the form specific 200 level course (in this case CRWR 209: Introduction to Fiction) and then into the 300 level course in that form. We want the students to have the technical grounding that the 200 level courses will give them in order that the 300 level class can focus on more advanced material and the



	<p>workshopping of student work. We intend for the 200 level prerequisite to required of all 300 level courses and have Category 2 revisions in progress to effect this.</p> <p><input type="checkbox"/> <b>Not available for Cr/D/F grading.</b> (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p><b>Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail</b> <b><input type="checkbox"/> grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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23 April 2013

To: Vancouver Senate

From: Vancouver Senate Curriculum Committee

Re: **CURRICULUM PROPOSALS FROM THE FACULTY OF COMMERCE  
AND BUSINESS ADMINISTRATION**

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The Senate Curriculum Committee has reviewed the attached Category 1 proposals from the Faculty of Commerce and Business Administration and is pleased to submit them for your consideration.

**New Courses**

COMM 126 (3)

BUSI 433 (3)

**Program Change**

Bachelor of Business in Real Estate>Degree Requirements>Real Estate Courses



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

**Category: (1)**

<b>Faculty: Commerce</b> <b>Department: Sauder School of Business</b> <b>Faculty Approval Date: March 21, 2013</b>  <b>Effective Session: Term 1 Year 2013W for Change</b>	<b>Date: March 25, 2013</b> <b>Contact Person: Brian Bemmels</b> <b>Phone: 2-0156</b> <b>Email: brian.bemmels@sauder.ubc.ca</b>
<b>Proposed Calendar Entry:</b>  <b>COMM 126 (3) Data: Description, Display, and Inference</b>  Introduction to the use of data and statistics to convey information on important issues of the world economy.	<b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BAMA">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BAMA</a>  <b>Present Calendar Entry:</b>  None.  <b>Type of Action:</b>  Create new course  <b>Rationale for Proposed Change:</b> This is a new course that Sauder will deliver as part of the new Bachelor of International Economics approved last year as part of the new Vancouver School of Economics. This is a required course in the program and not available for CR/D/F grading.  <b>X    Not available for Cr/D/F grading.</b>



THE UNIVERSITY OF BRITISH COLUMBIA

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

**Category: 1**

<b>Faculty: Commerce</b> <b>Department: Real Estate</b> <b>Faculty Approval Date: November 7, 2012</b>  <b>Effective Session 2013/14 WT1</b>	<b>Date: July 27, 2012</b> <b>Contact Person: John Bridal</b> <b>Phone: 250.642.2587</b> <b>Email: <a href="mailto:john.bridal@sauder.ubc.ca">john.bridal@sauder.ubc.ca</a></b>
<b>Proposed Calendar Entry:</b>  <b>BUSI 433 (3) Real Estate Business</b> General business skills for real estate practitioners.	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/course.s.cfm?code=BUSI">http://www.calendar.ubc.ca/vancouver/course.s.cfm?code=BUSI</a> <b>Present Calendar Entry: none</b> <b>Type of Action:</b> Adding BUSI 433 as a new course in the Bachelor of Business in Real Estate (BBRE) degree program.  <b>Rationale for Proposed Change:</b> Develop competencies in business development and management for real estate industry practitioners, to supplement their technical and professional skills.  <input type="checkbox"/> <b>Not available for Cr/D/F grading.</b> (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)  <input type="checkbox"/> <b>Pass/Fail</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)
<b>Proposed Calendar Entry:</b>  Plus at least 15 credits from the following specialty courses: <b>BUSI 433<sup>2</sup></b> <b>3</b> BUSI 441 <sup>2</sup> 3	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,296,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,296,0</a> <b>Present Calendar Entry:</b>  Plus at least 15 credits from the following specialty courses: BUSI 441 <sup>2</sup> 3

THE UNIVERSITY OF BRITISH COLUMBIA



BUSI 442 <sup>2</sup>	3	BUSI 442 <sup>2</sup>	3
BUSI 443 <sup>2</sup>	6	BUSI 443 <sup>2</sup>	6
BUSI 444 <sup>2</sup>	6	BUSI 444 <sup>2</sup>	6
BUSI 445 <sup>2</sup>	3	BUSI 445 <sup>2</sup>	3
BUSI 446 <sup>2</sup>	3	BUSI 446 <sup>2</sup>	3
BUSI 451 <sup>2</sup>	3	BUSI 451 <sup>2</sup>	3
BUSI 452 <sup>2</sup>	3	BUSI 452 <sup>2</sup>	3
BUSI 460 <sup>2</sup>	3	BUSI 460 <sup>2</sup>	3
One of BUSI 398, BUSI 497, or BUSI 499	4 - 6	One of BUSI 398, BUSI 497, or BUSI 499	4 - 6
GEOG 350 or URST 400	3	GEOG 350 or URST 400	3
Total Credits	15	Total Credits	15
		<p><b>Type of Action:</b> Specify BUSI 433 as a BBRE elective course.</p> <p><b>Rationale for Proposed Change:</b> Develop competencies in business development and management for real estate industry practitioners, to supplement their technical and professional skills.</p>	



23 April 2013

To: Vancouver Senate

From: Vancouver Senate Curriculum Committee

Re: **CURRICULUM PROPOSALS FROM THE FACULTY OF GRADUATE STUDIES**

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The Senate Curriculum Committee has reviewed the attached Category 1 proposals from the Faculty of Graduate Studies and is pleased to submit them for your consideration.

**Applied Science:**

BMEG 510 (4)  
EECE 508 (3)  
EECE 510 (3)  
EECE 535 (3)  
MECH 528 (3)  
NAME Course Code

**Commerce and Business Administration:**

Master of Business Administration Calendar Entry  
BABS 540 (0.8)  
BAMA 541 (0.8)  
BA 504 (3)  
EMBA 526 (1.5)

**Science:**

BIOL 560 (3)  
PHYS 572 (3)



THE UNIVERSITY OF BRITISH COLUMBIA  
Faculty of Applied Science  
Engineering Graduate Curriculum Report ~ Category 1 & 2 ~ Fall 2012

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

**Category: 1**

<p><b>Faculty:</b> Applied Science <b>Department:</b> Biomedical Engineering <b>Faculty Approval Date:</b> November 1, 2012 <b>Effective Session:</b> 13W Term 1 <b>Effective Academic Year:</b> 2013-2014</p>	<p><b>Date:</b> (October 29, 2012) February 25, 2013 <b>Contact Person:</b> Rizhi Wang <b>Phone:</b> 604-822-9752 <b>Email:</b> <a href="mailto:rzwang@mail.ubc.ca">rzwang@mail.ubc.ca</a></p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>BMEG 510 (4) Anatomy and Physiology with Applications to Biomedical Devices</b></p> <p>Anatomical structures and physiological principles of major body systems. Functional connections to operation of diagnostic and therapeutic equipment. Exploration of recent advances.</p> <p>Credit will be given for only one of: BMEG 410, BMEG 510.</p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BMEG">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BMEG</a></p> <p><b>Present Calendar Entry:</b> None <b>Type of Action:</b> Create new course</p> <p><b>Rationale:</b> Historically, this course has been taught as the first half of BMEG 530 (6 cr). The second half of 530 is available as a standalone course (BMEG 550). The current overlap is confusing to students, so we wish to discontinue offering 530 and allow students to register separately for the first half (510) and the second half (550) as they wish or as required by their particular program.</p> <p>Students in 510 will attend the same classes and some of the same seminar presentations as students in BMEG 410 (the undergraduate version of this course). In addition, they will participate in a separate graduate-student-only “Recent Advances” seminar series in the second half of the term in which they will prepare and deliver a seminar presentation covering one specific topic from the recent research or device development literature in depth.</p> <p>Rationale for credit load 4 credits: the course vector is [3-2-1*]. Students are in class 3h/week and participate in a weekly 2h seminar, presenting twice during the term. Four times during the course, they participate in a 1h lab experience. We judge this to merit 3 credits for the classroom-associated work and an additional credit for the combined</p>



THE UNIVERSITY OF BRITISH COLUMBIA  
Faculty of Applied Science  
Engineering Graduate Curriculum Report ~ Category 1 & 2 ~ Fall 2012

	<p>seminars and occasional short labs.</p> <p><b>X Not available for Cr/D/F grading.</b> (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p><b>Rationale for not being available for Cr/D/F:</b> The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> <b>Pass/Fail</b> <input type="checkbox"/> <b>Honours/Pass/Fail</b></p> <p><b>grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p> <p><b>Document ID# Nov12 U/G: G</b></p>
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THE UNIVERSITY OF BRITISH COLUMBIA  
Faculty of Applied Science  
Engineering Graduate Curriculum Report ~ Category 1 & 2 ~ Spring 2013

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

**Category: 1**

<p><b>Faculty:</b> Applied Science <b>Department:</b> Electrical &amp; Computer Engineering <b>Faculty Approval Date:</b> February 28, 2013 <b>Effective Session</b> WINTER Term 1 <b>Year for Change:</b> 2013-2014</p>	<p><b>Date:</b> February 5, 2013 <b>Contact Person:</b> Nick Jaeger <b>Phone:</b> 2-5673 <b>Email:</b> nickj@ece.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>EECE 508 (3) Multivariable Feedback Control</b></p> <p>Well-posedness and internal stability of feedback systems, performance limitations, uncertainty, LFT representations, robust stability and robust performance, model reduction, linear matrix inequalities, H-infinity control, multi-objective control, mu-analysis and synthesis, H-infinity gain-scheduling, control applications.</p> <p>Credit granted for one of: MECH 528 or EECE 508.</p> <p>Completion of MECH 466, MECH 468, EECE 360 or equivalent is recommended.</p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>Present Calendar Entry:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=EECE">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=EECE</a></p> <p><b>Type of Action:</b> Create New Course</p> <p><b>Rationale for Proposed Change:</b> This is a course that has been run for the past two years as a special topics course as MECH 550F and has been successful for both years. The instructor would like to offer it as a regular course offering now. Equivalent offered as MECH 528.</p> <p><input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading (undergraduate courses only)</b> (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> <b>Pass/Fail or</b>    <input type="checkbox"/> <b>Honours/Pass/Fail grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p> <p><b>Document #</b>    <b>Feb2013-C1-1</b>    <b>U/G: G</b></p>



THE UNIVERSITY OF BRITISH COLUMBIA  
Faculty of Applied Science  
Engineering Graduate Curriculum Report ~ Category 1 & 2 ~ Spring 2013

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

**Category: 1**

<b>Faculty:</b> Applied Science <b>Department:</b> Electrical and Computer Engineering <b>Faculty Approval Date:</b> Feb. 28, 2013 <b>Effective Session</b> Summer Term 2 <b>Year 2013 for Change</b>	<b>Date:</b> (January 31, 2013) March 4, 2013 <b>Contact Person:</b> David G. Michelson <b>Phone:</b> 604 822-3544 <b>Email:</b> davem@ece.ubc.ca
<p><b>Proposed Calendar Entry:</b></p> <p><b>EECE 510 (3) Strategy and Leadership for Engineers</b></p> <p>Strategic frameworks. Organizational change. Team dynamics, effectiveness and decision-making. Personal leadership style and development.</p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=EECE">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=EECE</a></p> <p><b>Present Calendar Entry:</b> n/a</p> <p><b>Type of Action:</b> Create New course</p> <p><b>Rationale:</b> UBC does not currently offer a graduate level course in <i>Strategy and Leadership for Engineers</i>. The proposed course will augment the curriculum of UBC's Engineering Management Program.</p> <p><b>X Not available for Cr/D/F grading (undergraduate courses only)</b>          (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> <b>Pass/Fail or</b>    <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>          (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p> <p><b>Document #</b>                      <b>U/G: G</b></p>





THE UNIVERSITY OF BRITISH COLUMBIA  
Faculty of Applied Science  
Engineering Graduate Curriculum Report ~ Category 1 & 2 ~ Spring 2013

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

**Category: 1**

<p><b>Faculty:</b> Applied Science <b>Department:</b> Electrical &amp; Computer Engineering <b>Faculty Approval Date:</b> February 28, 2013 <b>Effective Session</b> WINTER Term 1 <b>Year 2013 for Change</b></p>	<p><b>Date:</b> February 22, 2013 <b>Contact Person:</b> Nick Jaeger <b>Phone:</b> 2-5673 <b>Email:</b> nickj@ece.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>EECE 535 (3) Advanced Biophotonics</b></p> <p>Physical principles and design of optical microscopy, optical spectroscopy, and optical imaging devices and systems, and their applications in diagnostics and therapeutics.</p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=EECE">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&amp;code=EECE</a></p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> Create New course</p> <p><b>Rationale for Proposed Change:</b> Biophotonics is an important area of biomedical engineering which applies the photonics principles to the development of devices and instruments for the diagnosis and treatment of diseases. There is a need to introduce the state-of-the-art biophotonics techniques to the students. The course material has been offered as EECE 571T for six times and has been received well by the students.</p> <p><input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading (undergraduate courses only)</b> (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> <b>Pass/Fail or</b>    <input type="checkbox"/> <b>Honours/Pass/Fail grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p> <p><b>Document # Feb2013-C1-3</b>                      <b>U/G: G</b></p>



THE UNIVERSITY OF BRITISH COLUMBIA  
Faculty of Applied Science  
Engineering Graduate Curriculum Report ~ Category 1 & 2 ~ Spring 2013

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

**Category: 1**

<b>Faculty:</b> Applied Science <b>Department:</b> Mechanical Engineering <b>Faculty Approval Date:</b> February 28, 2013 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2013	<b>Date:</b> February 4, 2013 <b>Contact Person:</b> Jon Mikkelsen <b>Phone:</b> 2-2709 <b>Email:</b> mikk@mech.ubc.ca
<p><b>Proposed Calendar Entry:</b></p> <p><b>MECH 528 (3) Multivariable Feedback Control</b></p> <p>Well-posedness and internal stability of feedback systems, performance limitations, uncertainty, LFT representations, robust stability and robust performance, model reduction, linear matrix inequalities, H-infinity control, multi-objective control, mu-analysis and synthesis, H-infinity gain-scheduling, control applications.</p> <p>Credit granted for one of: MECH 528 or EECE 508.</p> <p>Completion of MECH 466, MECH 468, EECE 360 or equivalent is recommended.</p> <p><i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=MECH">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=MECH</a> </p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> Create New Course</p> <p><b>Rationale for Proposed Change:</b>          This is a course that has been run for the past two years as a special topics course as MECH 550F and has been successful for both years. The instructor would like to offer it as a regular course offering now. Equivalent offered as EECE 508.       </p> <p> <input checked="checked" type="checkbox"/> <b>Not available for Cr/D/F grading (undergraduate courses only)</b>          (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)       </p> <p> <input type="checkbox"/> <b>Pass/Fail or</b>     <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>          (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)       </p> <p><b>DOCUMENT ID# Feb2013-C1-5</b>  <b>U/G: G</b> </p>



THE UNIVERSITY OF BRITISH COLUMBIA  
Faculty of Applied Science  
Engineering Graduate Curriculum Report ~ Category 1 & 2 ~ Spring 2013

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

**Category: 1**

<b>Faculty:</b> Applied Sciences <b>Department:</b> Mechanical Engineering <b>Faculty Approval Date:</b> February 28, 2013 <b>Effective Session (W or S):</b> W <b>Effective Academic Year:</b> 2013	<b>Date:</b> February 22, 2013 <b>Contact Person:</b> Jon Mikkelsen <b>Phone:</b> 2-2709 <b>Email:</b> mikk@mech.ubc.ca
<b>Proposed Calendar Entry:</b>  <b>NAME</b> – Naval Architecture and Marine Engineering	<b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code</a>  <b>Present Calendar Entry:</b> n/a  <b>Type of Action:</b> Create new course code: NAME  <b>Rationale:</b> As part of the Department's strategic planning and curriculum redevelopment processes, it has undertaken a review of its offerings in the thermo-fluids area, and has elected to highlight its offerings in Naval Architecture and Marine Engineering. This has been driven, in part, by strong interest from the external community (whereby British Columbia will see a high level of shipbuilding activity over the next few decades), in part by a desire to collaborate more closely with related interests in the Departments of Civil Engineering and Materials Engineering, and in part to raise the profile, attract students (internationally and Canada-wide), and collaborate internationally. Thus, while the Thermo-Fluids Option will continue to benefit from such courses at the undergraduate level, the focus will be on introducing (and clarifying) a Naval Architecture and Marine Engineering focus area within the Department's existing MEng program. In this context, and in support of the Department's desire to encourage collaboration with partner departments, notably Civil Engineering and



THE UNIVERSITY OF BRITISH COLUMBIA  
Faculty of Applied Science  
Engineering Graduate Curriculum Report ~ Category 1 & 2 ~ Spring 2013

	<p>Materials Engineering, to collaborate with industry, to attract students, and to collaborate internationally, it is considered particularly important that the corresponding course code is NAME. This is the internationally recognized acronym for <i>Naval Architecture and Marine Engineering</i>. Thus, the leading international society in this field is the <i>Society of Naval Architects and Marine Engineers</i>, known by its acronym SNAME; and the <i>Department of Naval Architecture and Marine Engineering</i> of the University of Michigan, again with same acronym NAME, provides some of the world's leading university programs in this field.</p> <p><input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading (undergraduate courses only)</b> <b>Rationale for not being available for Cr/D/F:</b> Courses in the Faculty of Applied Science are not available to be taken for Cr/D/F.</p> <p><input type="checkbox"/> <b>Pass/Fail or</b>      <input type="checkbox"/> <b>Honours/Pass/Fail grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p> <p><b>DOCUMENT ID#   Feb2013-C1-6</b> <b>U/G: G</b></p>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<p><b>Faculty: Commerce</b>  <b>Department: Sauder School of Business</b>  <b>Faculty Approval Date: March 21, 2013</b></p> <p><b>Effective Session: Term 1 Year 2013W for Change</b></p>	<p><b>Date: March 25, 2013</b>  <b>Contact Person: Brian Bemmels</b>  <b>Phone: 2-0156</b>  <b>Email: brian.bemmels@sauder.ubc.ca</b></p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>Master of Business Administration</b></p> <p><b>For students that started the program from September 2012 through August 2013, please see <a href="#">here</a>.</b></p> <p><b>For students that started the program prior to September 2012, please see <a href="#">here</a>.</b></p> <p><b>Master of Business Administration (for students starting the program September 2013 or later)</b></p> <p>The Master of Business Administration (M.B.A.) provides an integrated course of study designed to prepare graduates to analyze problems, make decisions, and to manage, motivate, and lead people and organizations. Principal program components include a foundation in business, integration and career development components throughout the program, a choice of career track, and elective courses. A pre-program M.B.A. Preparation provides fundamentals for students who lack adequate academic preparation for the program.</p> <p>The program is available in either a 16-month or 28-month format. In determining the admissibility of a candidate to the Master of Business Administration Program, no distinction is made between</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1267">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1267</a></p> <p><b>Present Calendar Entry:</b></p> <p><b>Master of Business Administration</b></p> <p><del><b>Master of Business Administration (for students starting the program September 2012 or later)</b></del></p> <p><del>The Master of Business Administration (M.B.A.) provides an integrated course of study designed to prepare graduates to analyze problems, make decisions, and to manage, motivate, and lead people and organizations. Principal program components include an integrated foundation, a choice of career track, experiential learning, elective courses, and career development. A pre-program M.B.A. Preparation provides fundamentals for students who lack adequate academic preparation for the program.</del></p> <p><del>The program is available in either a 16-month or 28-month format. In determining the admissibility of a candidate to the Master of Business Administration Program, no distinction is made between 16-month and 28-month program students.</del></p> <p><del>Visit the <a href="#">program's website</a> for more information on admissions requirements and current program details.</del></p>



16-month and 28-month program students.

Visit the program's website for more information on admissions requirements and current program details.

Upon accepting an offer of admission to the M.B.A. Program, students will be required to pay a non-refundable deposit, which is applied to the first installment of tuition fees.

### **M.B.A. Preparation**

Students with limited management background or who lack adequate preparation in prerequisite courses will be required to participate in the Program Preparation courses. The Program Preparation provides non-credit basic business education immediately preceding the program orientation. Topics may include accounting, finance, economics, quantitative methods, business statistics, business communications, and case preparation skills. Since backgrounds vary, the extent of a student's required participation should be determined in consultation with a M.B.A. program advisor.

### **Integrated Professional Development**

The integration of the various business disciplines and professional development are key features of the program. This integrated professional development includes several components offered throughout the program:

- BA 504 (3.0) Integration & Professional Development: Foundation
- BA 507 (3.0) Integration & Professional Development: Global
- BA 512 (1.5) Integration & Professional Development: Experiential Learning
- BA 508 (2.0) Integration & Professional

~~Upon accepting an offer of admission to the M.B.A. Program, students will be required to pay a non-refundable deposit, which is applied to the first installment of tuition fees.~~

### **M.B.A. Preparation**

~~Students with limited management background or who lack adequate preparation in prerequisite courses will be required to participate in the Program Preparation courses. The Program Preparation provides four weeks of non-credit basic business education immediately preceding the program orientation. Topics include accounting, finance, economics, quantitative methods, business statistics, business communications, and case preparation skills. Since backgrounds vary, the extent of a student's required participation should be determined in consultation with a M.B.A. program advisor.~~

### **Integration**

~~The integration of the various business disciplines is a key feature of the program. This integration includes several components throughout the duration of the program:~~

- ~~• BA 505 (7.5 credits) MBA Integrated Foundation~~
- ~~• BA 506 (2.0) MBA Integrated Project~~
- ~~• BA 507 (3.0) MBA Context Integration~~
- ~~• BA 508 (2.0) MBA Capstone~~

### **Career Tracks**

~~Each student in the M.B.A. program may choose one of the offered career tracks or opt to do a "customized" program of study~~



<p><b>Development: Capstone</b></p> <p><b>Career Tracks</b></p> <p>Each student in the M.B.A. program may choose one of the offered career tracks or opt to do a “customized” program of study (customized programs require prior approval). Requirements vary between career tracks; however, each consists of a set of required modules. A list of current career tracks and requirements may be obtained from the M.B.A. Programs Office.</p> <p><b>Study Abroad and Exchange</b></p> <p>Study abroad and exchange programs are available at several international partner universities. Students who are selected to participate in this program will be enrolled in BA 530 by the M.B.A. Programs Office. See <a href="#">International Exchange</a> for further details.</p>	<p><del>(customized programs requires approval). Requirements vary between career tracks; however, each consists of a set of required modules. A list of current career tracks and requirements may be obtained from the M.B.A. Programs Office.</del></p> <p><b>Experiential Learning</b></p> <p><del>Experiential Learning, BA 512, is an integral part of the M.B.A. Program and will normally be taken during June, July, and August. This component of the M.B.A. Program enables a student to apply acquired skills to real world management problems under direct faculty supervision.</del></p> <p><b>Career Development</b></p> <p><del>This component, designated as BA 520, begins with orientation and runs throughout the program. Its aim is to foster teamwork and to develop career, leadership, and interpersonal skills. It also provides a forum for discussion of current events and contemporary business problems.</del></p> <p><b>Study Abroad and Exchange</b></p> <p><del>Study abroad and exchange programs are available at several international partner universities. Students who are selected to participate in this program will be enrolled in BA 530 by the M.B.A. Programs Office. See <a href="#">International Exchange</a> for further details.</del></p> <p><b>Master of Business Administration (for students that started the program prior to September 2012)</b></p> <p><del>The Master of Business Administration (M.B.A.) provides an integrated course of study designed to prepare graduates to analyze problems, make decisions, and to manage, motivate, and lead people and</del></p>
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	<p>organizations. Principal program components include an integrated core, a post-core consisting of a specialization, an internship/project and electives, and career development. A pre-core provides fundamentals for students who lack adequate academic preparation for the program.</p> <p>The program is available in either a 16-month or 28-month format. In determining the admissibility of a candidate to the Master of Business Administration program, no distinction is made between 16-month and 28-month program students.</p> <p>Visit the <a href="#">program's website</a> for more information.</p> <p>Upon accepting of an offer of admission to the M.B.A. program, students will be required to pay a non-refundable deposit, which is applied to the first installment of tuition fees.</p> <p><b>Pre-Core</b></p> <p>Students with limited management background or who lack adequate preparation in prerequisite courses will be required to participate in the pre-core program. The pre-core provides three weeks of non-credit basic business education immediately preceding the program orientation. Topics in the pre-core include accounting, economics, quantitative methods, business statistics, and case preparation skills. Since backgrounds vary, the extent of a student's required participation should be determined in consultation with a M.B.A. program advisor.</p> <p><b>Core (16-month)</b></p> <p>The 16-month M.B.A. core consists of the 18-credit required course, BA 500, taken</p>
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from September to December in the first year of studies and the 1.5 credit required course, BA 501 M.B.A. Core Capstone, taken later in the program.

### **Core (28-month)**

The M.B.A. core for the 28-month program will be offered at times suitable for this program of study. The schedule for the upcoming academic year is available from the M.B.A. Programs Office. All M.B.A. students in the 28-month program must complete the core in their first year of study. The 1.5 credit required course, BA 501 M.B.A. Core Capstone, must be taken later in the program.

### **Post-Core**

The post-core consists of 30 graduate credits plus an internship/project. The Faculty offers post-core courses in six-week 1.5 credit modules between January and December following completion of the core. 28-month program students will normally complete the post-core within an 18-month period.

### **Specializations**

Specializations are available as part of the post-core. Each student in the M.B.A. program may choose one of the specializations offered or opt to do a general program of study. Requirements vary between specializations; however, each consists of a set of required modules. Available specializations vary from year to year; a list of current specializations and requirements may be obtained from the M.B.A. Programs Office. Due to scheduling constraints, students seeking more than one specialization may need to take additional courses beyond the usual completion time for the degree.



	<p><b>Internship/Project</b></p> <p><del>The Internship/Project, BA 510, is an integral part of the M.B.A. program and will normally be taken during June, July, and August. This component of the M.B.A. program enables a student to apply acquired skills to management problems under direct faculty supervision.</del></p> <p><b>Career Development</b></p> <p><del>This component, designated as BA 520, begins with orientation and runs throughout the program. Its aim is to foster teamwork and to develop career, leadership, and interpersonal skills. It also provides a forum for discussion of current events and contemporary business problems.</del></p> <p><b>Study Abroad and Exchange</b></p> <p><del>Study abroad and exchange programs are available at several international partner universities. Students who are selected to participate in this program will be enrolled in BA 530 by the M.B.A. Programs Office. See <a href="#">International Exchange</a> for further details.</del></p> <p><b>Type of Action:</b></p> <p>Revised calendar entry for proposed changes to Full Time and Part Time MBA program.</p> <p><b>Rationale for Proposed Change:</b></p> <p>The Sauder School of business introduced major changes to the MBA program effective September 2012. Feedback from students, faculty and program office staff raised several issues with the structure and student workload during the 2012 fall term. In addition, students are unable to secure</p>
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	<p>many of the best summer internships due to the first year program continuing to early June. Most internship opportunities require an early May start. The following proposals are further refinements to the MBA program to be effective September 2013.</p> <p>See attached “UBC MBA SCC March 25, 2013” for details.</p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<p><b>Faculty:</b> Commerce  <b>Department:</b> Sauder School of Business  <b>Faculty Approval Date:</b> March 21, 2013</p> <p><b>Effective Session:</b> Term 1 Year 2013W  <b>for Change</b></p>	<p><b>Date:</b> March 25, 2013  <b>Contact Person:</b> Brian Bemmels  <b>Phone:</b> 2-0156  <b>Email:</b> brian.bemmels@sauder.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p>BABS 540 (0.8) Data Analysis and Utilization</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BABS">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BABS</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create New Course</p> <p><b>Rationale for Proposed Change:</b>  This is a new statistics “mini Module” of 10 hours instruction to be required in the full time and part time MBA programs. Students are required to have basic/elementary statistics as a pre-requisite to entering the program. If they do not have this, we provide this as an optional non-credit offering prior to the start of the program. This proposed module builds on this required background in statistics to provide regression modeling and applications to business problems. This will prepare students for the statistical analysis required in subsequent courses in the MBA program.</p> <p>Previously, this material was covered as part of BA 505 (7.5) Integrated Foundation, which is being discontinued in the MBA program.</p> <p><b>X Not available for Cr/D/F grading.</b>  (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p>



THE UNIVERSITY OF BRITISH COLUMBIA

	<div><input type="checkbox"/> <b>Pass/Fail</b> <input type="checkbox"/> <b>Honours/Pass/Fail</b></div> <div><b>grading</b></div> <div>(Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</div>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<p><b>Faculty:</b> Commerce  <b>Department:</b> Sauder School of Business  <b>Faculty Approval Date:</b> March 21, 2013</p> <p><b>Effective Session:</b> Term 1 Year 2013W  <b>for Change</b></p>	<p><b>Date:</b> March 25, 2013  <b>Contact Person:</b> Brian Bemmels  <b>Phone:</b> 2-0156  <b>Email:</b> brian.bemmels@sauder.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p>BAMA 541 (0.8) Product Service Management</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BAMA">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=BAMA</a></p> <p><b>Present Calendar Entry:</b>  N/A</p> <p><b>Type of Action:</b>  Create New Course</p> <p><b>Rationale for Proposed Change:</b>  This is a new “mini Module” of 10 hours instruction to be an elective in the full time and part time MBA programs.</p> <p>Last year (effective September 2012) we introduced 4 new “career tracks” in the MBA program replacing the previous “specializations.” At that time we also introduced 3 “mini Modules” that each introduce one of the tracks. However, we did not include a mini-module for the “product and service management” track. This module is an introduction to the PSM track, and may be taken by any student interested in exploring the PSM track as a possible track for them to complete.</p> <p>The PSM track develops a manager who combines a deep understanding of customer and market needs with strong knowledge in product/service manufacturing/delivery operations. The Product/Service manager should have product or service management knowledge that allows a high-level contribution to product &amp; service development as well as</p>



	<p>marketing strategy and operations management. Career Opportunities include Product / Brand Management, Service Management, and Operations Management across a wide range of private and public sector organizations.</p> <p><b>X Not available for Cr/D/F grading.</b> (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> <b>Pass/Fail</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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**UBC Curriculum Proposal Form  
Change to Course or Program**

**Category: (1)**

<p><b>Faculty:</b> Commerce/Sauder  <b>Department:</b>  <b>Faculty Approval Date:</b> March 21, 2013    <b>Effective Session for Change</b>    <b>W Term 1 Year 2013</b></p>	<p><b>Date:</b> FEB 15, 2013  <b>Contact Person:</b> Brian Bemmels  <b>Phone:</b> 2-0156  <b>Email:</b> brian.bemmels@sauder.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b>  BA 504 (3) Integration and Professional  Development: Foundation</p>	<p><b>URL:</b>  NA</p> <p><b>Present Calendar Entry:</b>  NA</p> <p><b>Type of Action:</b>    Create new course</p> <p><b>Rationale for Proposed Change:</b>  This is a new MBA module to be included in our renewed MBA program. Proposed Outline is attached. The course will be offered in the first two periods of the MBA program, and will kick-off the integration and professional development throughout the program. We are replacing the 2-credit BA 506 Integrated Project with this 3-credit course focused on integration and professional development activities that will enhance the preparedness of students for summer internships.</p> <p><b>X Not available for Cr/D/F grading.</b>  (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p>(grading is percentage.)</p>





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

**Category: (1)**

<p><b>Faculty:</b> Commerce  <b>Department:</b> Sauder School of Business  <b>Faculty Approval Date:</b> February 28, 2013</p> <p><b>Effective Session:</b> Term 1 Year 2013W  <b>for Change</b></p>	<p><b>Date:</b> March 25, 2013  <b>Contact Person:</b> Brian Bemmels  <b>Phone:</b> 2-0156  <b>Email:</b> brian.bemmels@sauder.ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p>EMBA 526 (1.5) International Health Care Systems</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=EMBA">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=EMBA</a></p> <p><b>Present Calendar Entry:</b>  NA</p> <p><b>Type of Action:</b>  Create New Course</p> <p><b>Rationale for Proposed Change:</b>  This is a new module offered in the EMBA – Health Care program. The course has already been successfully offered as a pilot course (EMBA 586C). The academic reasoning for this new course is that the Canadian Health Care system is unsustainable in its present form. Innovative solutions will be required. This module will provide participants with a:</p> <ul style="list-style-type: none"> <li>• broad understanding of English NHS, its major reforms and key challenges and be able to analyze the NHS as a complex organizational system;</li> <li>• appreciation for the breadth of stakeholders that constitute the NHS and the meso-level networks that enable and support health care delivery;</li> <li>• the different theoretical and practical perspectives on knowledge translation and evidence based practice;</li> <li>• understanding of the funding and partnership strategies used by the NHS to deliver care with a particular focus on community care provision.</li> </ul>



	<p><b>X Not available for Cr/D/F grading.</b> (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> <b>Pass/Fail</b> <input type="checkbox"/> <b>Honours/Pass/Fail</b> <b>grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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Contact: Dr. Bill Ramey  
Phone: 822-3300

Faculty Approval Date: March 4, 2013  
Email: [wramey@mail.ubc.ca](mailto:wramey@mail.ubc.ca)

## BIOLOGY

**Effective Date for Change:** 13W  
**Proposed Calendar Entry:**

**BIOL 560 (3) Theory of adaptive dynamics and evolutionary games**  
**[3-0-0]**

**Consult the credit exclusion list within the Faculty of science section of the calendar.**  
**[link to: Credit Exclusion Lists:**  
**<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,414> ]**

**Prerequisite: an introductory course in the mathematical treatment of population biology as well as a course in integral calculus.**

### **Present Calendar Entry:**

**Action:** Create new course.

**Rationale:** Mathematical and computational analysis of biological processes is of ever increasing importance in science. UBC has one of the strongest evolutionary theory groups in the world, but there are currently very limited opportunities for Biology graduate students to learn formal ecological and evolutionary theory, even though such theory is essential in formulating and understanding the concepts underlying empirical research. At the basic formal level, both ecology and evolution are represented as dynamical systems, and it is therefore imperative that theoretically minded graduate students acquire the skills to analyze dynamical systems as they occur in these disciplines. At present, no graduate course at UBC offers these learning opportunities. The course will serve to remedy this situation; it is aimed at graduate students in the Biology, Botany and Zoology programs. There is also likely to be interest from students in other programs, such as Mathematics.

**Supporting Documents: SCI-12-2-BIOL 560**

Contact: Dr. Bill Ramey Phone: 822-3300	Faculty Approval Date: March 4, 2013 Email: <a href="mailto:wramey@mail.ubc.ca">wramey@mail.ubc.ca</a>
<b>PHYSICS</b>	
<p><b>Effective Session:</b> 13S <b>Proposed Calendar Entry:</b></p> <p><b>PHYS 572 (3) Experimental methods in Quantum Materials</b></p>	<p><b>Present Calendar Entry:</b></p> <p><b>Action:</b> Create new course.</p> <p><b>Rationale:</b> Quantum Materials research utilizes a wide range of experimental techniques for characterization and fabrication that require specialized knowledge in order to properly apply and interpret results. The goal of this course is to give graduate students an overview of modern techniques such as electromagnetic and electron spectroscopies, scanning probe microscopies, transport measurements, low-temperature apparatus and vacuum technology used in this area of research. Assignments will include analysis of data sets and critique of current literature. The curriculum is expected to evolve with the techniques at the forefront of this field. This course fills a current void in our graduate program covering experimental science in this field, and will be a key course for all experimental condensed matter physics students and theoretical physics students in this area as well as graduate students in other materials related fields. Of particular timeliness, this course is being created to coincide with the CREATE-QuEST initiative, which aims to provide a broad-based graduate experience for students in areas of Quantum Materials and devices. If CREATE-QuEST funding is not available for the use of major shared facilities in the future, experiments based in laboratories at UBC will be used to provide practical experience.</p> <p><b>Supporting Documents:</b> SCI-12-2-PHYS 572</p>



23 April 2013

To: Vancouver Senate

From: Vancouver Senate Curriculum Committee

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

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The Senate Curriculum Committee has reviewed the attached Category 1 proposals from the Faculty of Land and Food Systems and is pleased to submit them for your consideration.

**New Courses**

FRE 460 (3)

LFS 297 (3)

Co-operative Education Program

LFS 398 (3)

LFS 399 (3)

LFS 498 (3)

LFS 499 (3)

**New Minor**

Minor in Science

## UBC Curriculum Proposal Form Change to Course or Program

**Category:** (1)

<p><b>Faculty:</b> Land and Food Systems  <b>Department:</b> Food, Nutrition and Health  <b>Faculty Approval Date:</b> March 21, 2013  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2013</p>	<p><b>Date:</b> January 11, 2013  <b>Contact Person:</b> Carol McAusland  <b>Phone:</b> 2-3350  <b>Email:</b> Carol.McAusland@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>FRE 460 (3) Economics of Food Consumption</b></p> <p>Microeconomics of consumer decisions and public policy in food contexts; foodborne illness; economic causes and consequences of obesity; sin taxes and prohibitions; information campaigns and advertising; labeling; food waste and ethics. [3-0]</p> <p>Prerequisites: One of ECON 101, ECON 301</p>	<p><b>Present Calendar Entry:</b> None.</p> <p><b>Type of Action:</b> Create new course.</p> <p><b>Rationale for Proposed Change:</b> The course has been successfully piloted for 2 years under the FRE 490 number with approximately 20 students per year.</p> <p><input type="checkbox"/> <b>Not available for Cr/D/F grading (undergraduate courses only)</b> (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p><b>Rationale for not being available for Cr/D/F:</b> The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> <b>Pass/Fail or</b>      <input type="checkbox"/> <b>Honours/Pass/Fail grading</b> (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>

## UBC Curriculum Proposal Form Change to Course or Program

### Category: 1

<p><b>Faculty:</b> Land and Food Systems  <b>Department:</b> N/A  <b>Faculty Approval Date:</b> March 21, 2013  <b>Effective Session:</b> W  <b>Year for Change:</b> 2013</p>	<p><b>Date:</b> February 18, 2013  <b>Contact Person:</b> Andrew Riseman  <b>Phone:</b> 604-822-9607  <b>Email:</b> andrew.riseman@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>LFS 297 (3) Directed Studies</b></p> <p>Restricted to Land and Food Systems students with first or second year status and a cumulative average of 72% or higher.</p> <p>Prerequisite: Approval of program advisor.</p>	<p><b>URL:</b> N/A</p> <p><b>Present Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> New Course</p> <p><b>Rationale for Proposed Change:</b>  This course is will allow 1<sup>st</sup> and 2<sup>nd</sup> year students to engage in independent learning opportunities similar to the upper level equivalent LFS 497: Directed Studies. Due to lower class standing, it is inappropriate for 1<sup>st</sup> and 2<sup>nd</sup> year students to enroll in a 400 level class. LFS 297 will utilize the same framework as a typical upper level directed studies course but at a level similar to other 200 level courses. Providing this type of guided independent study for 1<sup>st</sup> and 2<sup>nd</sup> year students will support UBC and Land and Food Systems goals to provide undergraduate students with a variety of student centered enriched educational opportunities. Course guidelines will be available to students and supervisors on the LFS website.</p> <p><input type="checkbox"/> <b>Not available for Cr/D/F grading.</b>  (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> <b>Pass/Fail or</b> <input type="checkbox"/> <b>Honours/Pass/Fail grading</b>  (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>

## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<p><b>Faculty:</b> Land and Food Systems  <b>Department:</b> N/A  <b>Faculty Approval Date:</b> March 21, 2013  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2013</p>	<p><b>Date:</b> February 1, 2013  <b>Contact Person:</b> Gwen Chapman  <b>Phone:</b> 2-6874  <b>Email:</b> gwen.chapman@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b>  Co-operative Education Program</p> <p>Co-operative Education is a process of education which integrates academic study with relevant, supervised and paid work experience in co-operating employer organizations.</p> <p>An optional Co-operative Education Program is available for students in all Land and Food Systems programs, with the exception of students in the Dietetics Major of B.Sc. in Food, Nutrition and Health. The Program is intended to help prepare interested and qualified students for careers within the private or public sectors with at least four work terms (i.e. each work term is normally 4 months long) supervised by qualified professionals. Faculty advisors or Co-op coordinators also conduct site visits at the student's work place and provide advice and support for the placement.</p> <p>To be eligible, students must be in at least second year of an undergraduate program in the Faculty of Land and Food Systems (other than the Dietetics Major). Admission is by application to the Science Co-op Office. Selection of students will be based on academic performance and general suitability to the work environment as determined by the Co-op intake interview. The total enrolment will be subject to the availability of appropriate work placements. The work placements are arranged by mutual agreement between</p>	<p><b>URL:</b>  New entry to be accessed via  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,194,0,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,194,0,0</a></p> <p><b>Present Calendar Entry:</b>  None</p> <p><b>Type of Action:</b>  Create New Calendar Entry for New Co-operative Education Program</p> <p><b>Rationale for Proposed Change:</b>  Land and Food Systems Co-op has been offered through Science Co-op for many years. However, there is no information about this in the UBC Calendar, and LFS students have been registered in Biology Co-op courses for their Co-op work terms. To provide more visibility for the program and to better reflect the nature of what students are doing, we are introducing specific LFS Co-op courses, as well as a calendar entry specific to the LFS Co-op. The program will continue to be administered through the Science Co-op Office.</p>



<p>students and employing organizations. Participating students register for LFS 398, 399, 498 or 499 as appropriate, and pay the Cooperative Education program fee per course and Co-op Workshop fee as listed under <a href="#">Program, Course and Faculty Fees</a>.</p> <p>Graduation in the Co-operative Education Program for Land and Food Systems requires a student to complete LFS 398, 399, 498 and 499, in addition to the normal academic requirements.</p> <p>Detailed information on the program can be obtained from the Co-operative Education Office in Room 170, Chemistry and Physics Building, 6221 University Boulevard, Vancouver, BC V6T 1Z1</p>	
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<p><b>Proposed Calendar Entry:</b></p> <p><b>LFS 398 (3) CO-OPERATIVE WORK PLACEMENT I</b> Work experience in relevant private and/or public sector settings. Work terms are normally four months long. Restricted to students admitted to the Co-op Program in Land and Food Systems. Pass/Fail.</p> <p>Prerequisite: Must attend all Co-op pre-employment workshops.</p>	<p><b>URL:</b></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> This will be a co-operative work placement course in the LFS Co-op program.</p> <p><input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading</b></p> <p><b>Rationale for not being available for Cr/D/F:</b> All existing Co-op courses are not available for Cr/D/F and follow a Pass/Fail grading scheme.</p> <p><input checked="" type="checkbox"/> <b>Pass/Fail</b> Co-op students will receive a passing grade on their work term should they fulfill the following requirements:</p> <ol style="list-style-type: none"> <li>1. Receive satisfactory performance evaluation (evaluated by their employer).</li> <li>2. Submitted a technical report at the end of their work term and receive a satisfactory mark for the report.</li> </ol> <p>Co-op program reserves the right to fail a student when:</p> <ol style="list-style-type: none"> <li>1. They are dismissed from a job due to poor performance.</li> <li>2. They violated co-op policy on a work term.</li> <li>3. They fail to submit all required work term documentation.</li> </ol>
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<p><b>Proposed Calendar Entry:</b></p> <p><b>LFS 399 (3) CO-OPERATIVE WORK PLACEMENT II</b> Work experience in relevant private and/or public sector settings. Work terms are normally four months long. Restricted to students admitted to the Co-op Program in Land and Food Systems. Pass/Fail.</p> <p>Prerequisite: LFS 398</p>	<p><b>URL:</b></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> This will be a co-operative work placement course in the LFS Co-op program.</p> <p><input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading</b></p> <p><b>Rationale for not being available for Cr/D/F:</b> All existing Co-op courses are not available for Cr/D/F and follow a Pass/Fail grading scheme.</p> <p><input checked="" type="checkbox"/> <b>Pass/Fail</b> Co-op students will receive a passing grade on their work term should they fulfill the following requirements:</p> <ol style="list-style-type: none"> <li>1. Receive satisfactory performance evaluation (evaluated by their employer).</li> <li>2. Submitted a technical report at the end of their work term and receive a satisfactory mark for the report.</li> </ol> <p>Co-op program reserves the right to fail a student when:</p> <ol style="list-style-type: none"> <li>1. They are dismissed from a job due to poor performance.</li> <li>2. They violated co-op policy on a work term.</li> <li>3. They fail to submit all required work term documentation.</li> </ol>
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<p><b>Proposed Calendar Entry:</b></p> <p><b>LFS 498 (3) CO-OPERATIVE WORK PLACEMENT III</b> Work experience in relevant private and/or public sector settings. Work terms are normally four months long. Restricted to students admitted to the Co-op Program in Land and Food Systems. Pass/Fail.</p> <p>Prerequisite: LFS 399</p>	<p><b>URL:</b></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> This will be a co-operative work placement course in the LFS Co-op program.</p> <p><input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading</b></p> <p><b>Rationale for not being available for Cr/D/F:</b> All existing Co-op courses are not available for Cr/D/F and follow a Pass/Fail grading scheme.</p> <p><input checked="" type="checkbox"/> <b>Pass/Fail</b> Co-op students will receive a passing grade on their work term should they fulfill the following requirements:</p> <ol style="list-style-type: none"> <li>1. Receive satisfactory performance evaluation (evaluated by their employer).</li> <li>2. Submitted a technical report at the end of their work term and receive a satisfactory mark for the report.</li> </ol> <p>Co-op program reserves the right to fail a student when:</p> <ol style="list-style-type: none"> <li>1. They are dismissed from a job due to poor performance.</li> <li>2. They violated co-op policy on a work term.</li> <li>3. They fail to submit all required work term documentation.</li> </ol>
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<p><b>Proposed Calendar Entry:</b></p> <p><b>LFS 499 (3) CO-OPERATIVE WORK PLACEMENT IV</b></p> <p>Work experience in relevant private and/or public sector settings. Work terms are normally four months long. Restricted to students admitted to the Co-op Program in Land and Food Systems. Pass/Fail.</p> <p>Prerequisite: LFS 498</p>	<p><b>URL:</b></p> <p><b>Present Calendar Entry:</b> None</p> <p><b>Type of Action:</b> Create new course</p> <p><b>Rationale for Proposed Change:</b> This will be a co-operative work placement course in the LFS Co-op program.</p> <p><input checked="" type="checkbox"/> <b>Not available for Cr/D/F grading</b></p> <p><b>Rationale for not being available for Cr/D/F:</b> All existing Co-op courses are not available for Cr/D/F and follow a Pass/Fail grading scheme.</p> <p><input checked="" type="checkbox"/> <b>Pass/Fail</b></p> <p>Co-op students will receive a passing grade on their work term should they fulfill the following requirements:</p> <ol style="list-style-type: none"> <li>1. Receive satisfactory performance evaluation (evaluated by their employer).</li> <li>2. Submitted a technical report at the end of their work term and receive a satisfactory mark for the report.</li> </ol> <p>Co-op program reserves the right to fail a student when:</p> <ol style="list-style-type: none"> <li>1. They are dismissed from a job due to poor performance.</li> <li>2. They violated co-op policy on a work term.</li> <li>3. They fail to submit all required work term documentation.</li> </ol>
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## UBC Curriculum Proposal Form Change to Course or Program

### Category: (1)

<p><b>Faculty:</b> Land and Food Systems  <b>Department:</b> N/A  <b>Faculty Approval Date:</b> March 21, 2013  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2013</p>	<p><b>Date:</b> February 18, 2013  <b>Contact Person:</b> Dr. Gwen Chapman  <b>Phone:</b> 2-6874  <b>Email:</b> gwen.chapman@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p>  <p><b>Minor Programs</b></p> <p>Minor in Commerce</p> <p>Students wanting a foundation in business management ... student's transcript.</p> <p><b>Minor in Science</b></p> <p>Enrolment in the Science Minor program is limited to students eligible for third-year standing with an average of at least 68% in each of the previous two years. An acceptable program must comprise courses recognized in the Faculty of Science that are for credit towards a Bachelor of Science degree and consist of at least 18 credits numbered 300 or higher in a single subject (see <a href="#">Biochemistry</a>, <a href="#">Chemistry</a>, <a href="#">Environmental Sciences</a>, and <a href="#">Oceanography Minor</a> listings for exceptions), together with any necessary prerequisites. Students are strongly advised to design a coherent and academically sound course of studies for their proposed minor, which must be approved by the Land and Food Systems Student Services office at the beginning of third year. Application forms may be obtained from the Student Services office or from the <a href="#">Land and Food Systems website</a>. Completed applications must be returned no later than May 15.</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,194,909,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,194,909,0</a></p> <p><b>Present Calendar Entry:</b></p> <p>Minor in Commerce</p> <p>Students wanting a foundation in business management ... student's transcript.</p> <p><b>Type of Action:</b>  New Minors in Science for LFS students</p> <p><b>Rationale for Proposed Change:</b>  Currently, students in Land and Food Systems undergraduate programs can apply for a Minor in Commerce, and for students in Food, Nutrition and Health, a Minor in Kinesiology is also available. Some Land and Food Systems students have also requested a Minor in Science. This change will allow for this. Minors in Science are also available in Kinesiology and Science.</p>

**Entry into and continuation in the Minor requires that the student remains in [Good Standing](#). Where space in courses required for the Minor is limited, students may be required to maintain a sessional average higher than the minimum for Good Standing. Upon successful completion of the Minor program, the notation “Minor in [Subject]” will be denoted on the student’s transcript.**

**Students might encounter difficulty fitting the courses for the Minor into their program timetable; careful planning is essential, and completion of the Minor program might require an addition period of study beyond the usual 4 years.**

**No more than 6 upper-level credits that count toward the restricted elective requirements for the LFS major or honours may be double-counted to fulfill requirements for the Science minor.**

**Note: Students who wish to pursue a Minor in Science should be aware of the prerequisites of many of the upper-level Science courses. Space in many courses is limited. Admission to a science minor does not guarantee access to courses agreed upon for the minor.**

<p><b>Proposed Calendar Entry:</b></p> <p>Degree Requirements and Minor <b>Options</b></p> <p>Applied Animal Biology Major</p> <p>...</p> <p><sup>4</sup> To be selected in consultation with a program advisor. Credits can include APBI 496 (3-6) and/or a semester studying at another approved institution including those outside Canada. Students can also combine the Fourth Year Experience with restricted credits to complete a season-long practicum at the Centre for Sustainable Food Systems at UBC Farm, at other approved farms, or at an approved educational or research institution</p> <p><b>Minor Options</b> Applied Biology students are eligible to apply for a Minor in Commerce or a Minor in Science as described <a href="#">here</a>.</p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.194,897,1446">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.194,897,1446</a></p> <p><b>Present Calendar Entry:</b></p> <p>Degree Requirements and Minors<del>s</del></p> <p>Applied Animal Biology Major</p> <p>...</p> <p><sup>4</sup> To be selected in consultation with a program advisor. Credits can include APBI 496 (3-6) and/or a semester studying at another approved institution including those outside Canada. Students can also combine the Fourth Year Experience with restricted credits to complete a season-long practicum at the Centre for Sustainable Food Systems at UBC Farm, at other approved farms, or at an approved educational or research institution</p> <p><b>Type of Action:</b> Change title and add “Minor Options” to Degree Requirements and Minors</p> <p><b>Rationale for Proposed Change:</b> Currently, students in Land and Food Systems undergraduate programs can apply for a Minor in Commerce. Some Land and Food Systems students have also requested a Minor in Science, for which approval is being sought in an accompanying curriculum proposal. This change will direct Applied Biology students to the appropriate information in the Calendar.</p>
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<p><b>Proposed Calendar Entry:</b></p> <p>Degree Requirements <b>and Minor Options</b></p> <p>To qualify for the Bachelor of Science in Global Resource Systems, students must complete at least 3 credits of first-year English. Although English 112 is highly recommended, qualified students are encouraged to consider English 120 and/or 121.</p> <p>...</p> <p><sup>12</sup> Met by learning in the region of specialization for at least one term, or three-month period. Options include participation in UBC's Go Global Student Mobility Programs or work-based learning (internships). Must be pre-approved by a program advisor.</p> <p><b>Minor Options</b> Global Resource Systems students are eligible to apply for a Minor in Commerce or a Minor in Science as described <a href="#">here</a>.</p>	<p><b>URL:</b> <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.194,262,20">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.194,262,20</a></p> <p><b>Present Calendar Entry:</b></p> <p>Degree Requirements</p> <p>To qualify for the Bachelor of Science in Global Resource Systems, students must complete at least 3 credits of first-year English. Although English 112 is highly recommended, qualified students are encouraged to consider English 120 and/or 121.</p> <p>...</p> <p><sup>12</sup> Met by learning in the region of specialization for at least one term, or three-month period. Options include participation in UBC's Go Global Student Mobility Programs or work-based learning (internships). Must be pre-approved by a program advisor.</p> <p><b>Type of Action:</b> Change title and add “Minor Options” to Degree Requirements</p> <p><b>Rationale for Proposed Change:</b> Currently, students in Land and Food Systems undergraduate programs can apply for a Minor in Commerce. Some Land and Food Systems students have also requested a Minor in Science, for which approval is being sought in an accompanying curriculum proposal. This change will direct Global Resource Systems students to the appropriate information in the Calendar.</p>
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<p><b>Proposed Calendar Entry:</b></p> <p>Degree Requirements and Minor <b>Options</b></p> <p>Candidates for the B.Sc. (FNH) degree must complete the requirements as required for each major.</p> <p><b>Minor Options</b>  <b>Food, Nutrition and Health students are eligible to apply for a Minor in Commerce or a Minor in Science as described <a href="#">here</a>.</b></p> <p>Minor in Kinesiology ...</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.194,261,10">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.194,261,10</a></p> <p><b>Present Calendar Entry:</b></p> <p>Degree Requirements and Minors</p> <p>Candidates for the B.Sc. (FNH) degree must complete the requirements as required for each major.</p> <p>Minor in Kinesiology ...</p> <p><b>Type of Action:</b>  Change title and add “Minor Options” to Degree Requirements and Minors</p> <p><b>Rationale for Proposed Change:</b>  Currently, students in Land and Food Systems undergraduate programs can apply for a Minor in Commerce, and for students in Food, Nutrition and Health, a Minor in Kinesiology is also available. Some Land and Food Systems students have also requested a Minor in Science, for which approval is being sought in an accompanying curriculum proposal. This change will direct Food, Nutrition and Health students to the appropriate information in the Calendar.</p>
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23 April 2013

To: Vancouver Senate

From: Vancouver Senate Curriculum Committee

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

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The Senate Curriculum Committee has reviewed the attached Category 1 proposals from the Faculty of Medicine and is pleased to submit them for your consideration.

**Changed Courses**

MEDG 419 (3)

MEDG 420 (3)



## UBC Curriculum Proposal Form Change to Course or Program

**Category: 1**

<p><b>Faculty:</b> Medicine  <b>Department:</b> Medical Genetics  <b>Faculty Approval Date:</b> March 19, 2013  <b>Effective Session (W or S):</b> W  <b>Effective Academic Year:</b> 2013</p>	<p><b>Date:</b> December 24, 2012  <b>Contact Person:</b> Louis Lefebvre  <b>Phone:</b> 822-5310  <b>Email:</b> louis.lefebvre@ubc.ca</p>
<p><b>Proposed Calendar Entry:</b></p> <p><b>MEDG 419 (3) Developmental Origin of Human Disorders</b></p> <p><b>Genetic and epigenetic determinants of development from conception to birth. Topics include development of the neural tube, face, heart, endoderm, blastocyst, embryonic stem cells, gastrulation, genomic imprinting, placental complications, chromosomal abnormalities and prenatal diagnosis. Discussions based on published research articles. [3-0-1]</b></p> <p><i>Prerequisite:</i> One of <b>BIOL 234</b>, BIOL 334 and one of <b>BIOL 331</b>, BIOL 335. A standing of 'B' or higher recommended.</p>	<p><b>URL:</b>  <a href="http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=MEDG">http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&amp;code=MEDG</a></p> <p><b>Present Calendar Entry:</b>  <b>MEDG 419 (3) Human Cytogenetics</b></p> <p><del>Human chromosome variation as it relates to genetic disease. Cytogenic diagnostic techniques, structural and numerical chromosome anomalies, genomic organization, epigenetics, and mutation. [3-0-0]</del></p> <p><i>Prerequisite:</i> All of BIOL 334, BIOL 335. A standing of 'B' or higher recommended.</p> <p><b>Type of Action:</b>  Change of course title, description and prerequisites.</p> <p><b>Rationale for Proposed Change:</b>  MEDG 419 and MEDG 420, have significantly evolved over the years to integrate more contemporary topics in Medical Genetics and Genomics. As a consequences of these changes to the curriculum, we believe that it is now time to adjust the calendar descriptions of these courses to reflect their actual curriculum content.  MEDG 419 (formerly Human Cytogenetics) has undergone a significant shift in focus. Although fundamental aspects of cytogenetics and chromosomal abnormalities are still part of the offered curriculum, this traditionally more important topic has been significantly expanded to reflect current topics of active</p>



research in the general field of developmental functional genomics. The main objective of the course has essentially remained the same: to introduce important areas of research describing our current knowledge on the inherited mutations associated with congenital abnormalities in human. However to reflect the major shift from chromosomal abnormalities to mutations which occurred at the end of the last century, as well as our better understanding of the developmental pathways affected by these mutations, the course now also covers topics such as meiotic abnormalities, epigenetics, as well as discussions of genes implicated in important developmental processes. For the latter topic, examples are drawn from reverse genetics in the mouse, which has provided the more tractable and powerful model organism to understand the phenotypic consequences of developmental mutations.

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**Not available for Cr/D/F grading  
(undergraduate courses only)**

(Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)



**Proposed Calendar Entry:**

MEDG 420 (3) Human **Genomics and Medical Genetics**

**Sequence and structure of the human genome. Human genetic evolution. Identification of genes affecting normal and pathological variation. Molecular mechanisms of genetic diseases and disorders. Medical applications of human genetics.** [3-0-0]

*Prerequisite:* BIOL 335. A standing of 'B' or higher is recommended.

**URL:**

<http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&code=MEDG>

**Present Calendar Entry:**

**MEDG 420 (3) Human ~~Biochemical and Molecular~~ Genetics**

~~Analysis of human biology using information from the sequence of the human genome. Normal and pathological human variation. Genetic basis of diversity and individuality, identification of human disease genes, and potential applications of the sequence information.~~ [3-0-0]

*Prerequisite:* All of BIOL 335, ~~BIOC 300~~. A standing of 'B' or higher is recommended.

**Type of Action:**

Change of course title, description and prerequisites.

**Rationale for Proposed Change:**

MEDG 419 and MEDG 420, have significantly evolved over the years to integrate more contemporary topics in Medical Genetics and Genomics. As a consequences of these changes to the curriculum, we believe that it is now time to adjust the calendar descriptions of these courses to reflect their actual curriculum content.

MEDG 420 still has a strong focus on Human Molecular Genetics, but the emphasis is now more on genomic and less on biochemical aspects, also to reflect important developments in the field in the last decade. Since it now covers important introductory topics in the analysis of gene function and mutations in the field of medical genetics, we feel that students interested in both MEDG 419 and 420 would in fact benefit from taking 420 first. As part of our calendar changes, we are

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therefore now offering 420 in term W1 and 419 in term W2.

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**Not available for Cr/D/F grading  
(undergraduate courses only)**

(Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)