

**SENATE MEETING  
PUBLIC SESSION  
MINUTES**

January 23, 2013

3:30 – 5:30 PM

Senate Chambers (Room 1079 Administration Building)

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**Present:**

R. Bird, C. Carriere, D. Casperson, J. Crosina, R. Currie-Wood, M. Dale, B. Deo, M. Green, S. Green, K. Guest, L. Handfield, T. Hanschen (Secretary of Senate), K. Hutchings, G. Iwama (Chair), E. Korkmaz, C. Myers (Recording), K. Mytting, M. Nitz, C. Nolin (Vice Chair), D. Nyce, R. Robinson, D. Ryan, J. Safaei Boroojeny, P. Sanborn, A. Stroet, R. Tait (Acting Dean, CASHS), R. Tallman, S. Wagner, B. Wang, T. Whitcombe, W. Younas, S. Zahir

**Regrets:**

E. Annis, M. Archie, R. Brouwer, L. Copeland (Acting University Librarian), D. Leighton-Stephens, B. Murray, F. Islam, D. McDonald, C. Silva

**Absent:**

K. Kuo, D. Macknak, K. Walske

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The meeting commenced at 3:30 p.m. Dr. Iwama introduce the new Vice President Research, Dr. Ranjana Bird.

**1.0      S-201301.01  
Approval of the Agenda  
Whitcombe**

That the agenda for the January 23, 2013 Public Session of Senate be approved as presented.

A Senator suggested that, in relation to the report from the Senate Committee on Academic Policy and Planning, it would be illogical to approve some of the motions on the consent agenda prior to considering some that were on the regular agenda. The following motion was therefore proposed:

**Motion to amend the agenda:**

Whitcombe / Deo

That agenda item 8.0 (Approval of Motions on the Consent Agenda) be moved to become agenda item 9.1.1.

It was requested that motions SCAPP201201.12 to SCAPP201201.14 be removed from the consent agenda and placed on the regular agenda. However, as those motions were for the information of Senate only, it was suggested that the Senator simply ask the questions he had about the motions when they were reached on the agenda, to which he agreed.

CARRIED.

The motion to approve the agenda, as amended, was also CARRIED.

## 2.0 Approval of Senate Minutes

### **S-201301.02**

#### **Senate Minutes of December 12, 2012**

Zahir

That the minutes of the December 12, 2012 Public Session of Senate be approved as presented.  
CARRIED.

### **S-201301.03**

#### **Senate Minutes of November 28, 2012**

Deo

That the minutes of the November 28, 2012 Public Session of Senate be approved as presented.  
CARRIED.

## 3.0 Business Arising from Previous Minutes of Senate

### 3.1 Job description and selection procedures — Vice Provost, Student Engagement **Dale**

Dr. Dale noted that this position was the heir to the Dean of Student Success and Enrolment Management. That area has undergone changes and the new position is a Vice Provost, similar to what other universities are doing. Student Engagement is an appropriate title for the list of duties associated with the position. The selection procedures for this position are similar to those used for recruiting Deans. Dr. Dale indicated that he was seeking to have these documents approved by Senate and that they would then be forwarded to the Board of Governors for consideration. As a result, the following motion was put:

#### **Motion:**

Zahir / Casperson

That the job description and appointment procedures for the position of Vice Provost, Student Engagement be approved.

A Senator suggested that someone representing the interests of Aboriginal engagement should be added to the membership for the selection committee.

#### **Friendly amendment:**

That a representative from the First Nations Centre (for example, the Director) or someone similarly representing the interests of Aboriginal engagement or initiatives be added to the membership for the search committee.

The main motion and amendment were CARRIED.

### 3.2 **S-201301.04**

#### **Creation of a Health Research Institute**

Ryan

That, on the recommendation of the Senate Committee on Research and Graduate Studies, the creation of a Health Research Institute be approved as proposed.

Effective date: Immediately upon approval by Senate

CARRIED.

## 4.0 President's Report **Iwama**

Dr. Iwama reported on a number of matters. His report is attached to these minutes as "Appendix I."

## 5.0 Report of the Provost **Dale**

Dr. Dale reported to Senators on the status of current recruitment activities. He noted that the selection committee for the Dean of CASHS would be meeting tomorrow. The Librarian search committee was organized and had identified a search firm but had not yet met. The Green Manager position received very few applications so a search firm had been engaged to develop a larger pool of candidates.

## 6.0 Report of the Registrar

Hanschen

The Registrar provided a report to Senate, which is attached to these minutes as “Appendix II.” He also made a presentation to Senate (attached to these minutes as Appendix III).

## 7.0 Question Period

A Senator asked about the process for parking courses, so Dr. Dale explained the mechanism that was passed by Senate, noting the process had not yet been undertaken.

A Senator indicated he had heard that the report by Deloitte (regarding the possibility of saving money in the post-secondary education sector by sharing services and resources) was near the point of being ready for release, and asked Dr. Iwama if he was able to comment. Dr. Iwama replied that the report has not yet been released and that he expects the Ministry of Advanced Education needs to review and approve the report before that can happen.

The President was asked whether he could provide an update with regard to the fundraising campaign being undertaken. Dr. Iwama responded that the Development Office has a meeting planned with two companies, one from Vancouver and one from the east coast, to discuss the development of a proposal, including the structure and an action plan. He offered to report progress after that meeting.

A Senator asked about the cost to the University of implementing the new website. Dr. Iwama replied that he did not know, but that most of the work was done by UNBC employees so he could attempt to get an estimate of incremental costs.

It was questioned whether there are emergency student scholarships available. Acting Dean Owen responded that there are funds available through the Awards and Financial Aid Office. A student Senator added that the Northern Undergraduate Student Society also offers emergency funds and has a food bank for students.

Clarification with regard to the status of the Sustainability Manager position was sought. The incumbent had involvement with faculty and staff members, and projects were affected by his departure. The Senator noted that the optics were problematic and asked that clarification be provided to help people understand the process that was undertaken in relation to this position, such as why the contract could not have been extended, for instance. Dr. Dale replied to the Senator’s concerns, noting that the University was taken aback by the very small pool of candidates and have engaged a search firm to assist them with recruitment. He also apologized for the lack of a smooth transition with getting a permanent appointment to this position, and asked Senators to share information about this position to any potential candidates.

A Senator asked Senator Nolin how many students were participating in the block courses, and she noted there were 8 students taking all courses, 13 in her course, and 10 in Dr. Neil Hanlon’s course. The Senator asked whether the University planned on expanding block offerings and asked how we could accommodate courses that generally have 80 students in them. Dr. Iwama replied that one university has been teaching this way successfully for 30 years and that he would be happy to discuss those details. He added that it is difficult to mix block teaching with formal ways of scheduling.

## 8.0 S-201301.05

### **Approval of Motions on the Consent Agenda**

That the motions on the consent agenda, except for those removed for placement on the regular agenda, be approved as presented.

As a result of the agenda being amended, this motion was moved to become agenda item 9.1.1.

## 9.0 Committee Reports

### 9.1 Senate Committee on Academic Policy and Planning

Dale

**“For Approval” Items:**

**S-201301.06**

**Approval of New Degree — Joint Major in Environmental Studies / Political Science**

Ryan

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the new Joint Major in Environmental Studies/Political Science be approved as proposed.

Proposed start date: September 2013

CARRIED.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

The Joint Major in Environmental Studies and Political Science is for students who want both a broad understanding of environmental issues and the political knowledge needed to respond to those issues.

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in Environmental Studies and Political Science is 120 credit hours.

**Program Requirements**

**Lower-Division Requirement**

<u>ANTH 102-3</u>	<u>Anthropology: A World of Discovery</u>
<u>or FNST 100-3</u>	<u>The Aboriginal Peoples of Canada</u>
<u>BIOL 110-3</u>	<u>Introductory Ecology</u>
<u>ENPL 104-3</u>	<u>Introduction to Planning</u>
<u>ENVS 101-3</u>	<u>Introduction to Environmental Citizenship</u>
<u>GEOG 101-3</u>	<u>Human Geographies of Global Change</u>
<u>GEOG 204-3</u>	<u>Introduction to GIS for the Social Sciences</u>
<u>or GEOG 205-3</u>	<u>Cartography and Geomatics</u>
<u>GEOG 206-3</u>	<u>Society and Space</u>
<u>INTS 205-3</u>	<u>Introduction to International Studies</u>
<u>POLS 100-3</u>	<u>Contemporary Political Issues</u>
<u>POLS 200-3</u>	<u>Canadian Government and Politics</u>
<u>POLS 202-3</u>	<u>Canada in Comparative Perspective</u>
<u>POLS 270-3</u>	<u>Political Philosophy: Antiquity to Early Modernity</u>

**Upper-Division Requirement**

<u>ENVS 306-3</u>	<u>Human Ecology</u>
<u>ENVS 309-3</u>	<u>Gender and Environmental Studies</u>
<u>OR GEOG 305-3</u>	<u>Political Ecology</u>
<u>OR GEOG 420-3</u>	<u>Geographies of Environmental Justice</u>
<u>ENVS 325-3</u>	<u>Global Environmental Change: Science and Policy</u>
<u>ENVS 326-3</u>	<u>Natural Resources, Environmental Issues and Public Engagement</u>
<u>FNST 304-3</u>	<u>First Nations Environmental Philosophy and Knowledge</u>
<u>or NREM 303-3</u>	<u>First Nations' Approaches to Resource Management</u>
<u>NREM 306-3</u>	<u>Society, Policy and Administration</u>

<u>or POLS 344-3</u>	<u>Society, Policy and Administration of Natural Resources</u>
<u>POLS 302-3</u>	<u>How Government Works</u>
<u>or POLS 320-3</u>	<u>Canadian Politics and Policy</u>
<u>POLS 303-3</u>	<u>Democracy and Dictatorship</u>
<u>POLS 370-3</u>	<u>Political Philosophy</u>
<u>or POLS 372-3</u>	<u>Theories of Justice</u>
<u>ENPL 401-3</u>	<u>Environmental Law</u>
<u>ENVS 440-(2-6)</u>	<u>Internship</u>
<u>or POLS 440-3</u>	<u>Internship I</u>
<u>ENVS 414-3</u>	<u>Environmental and Professional Ethics</u>
<u>ORTM 408-3</u>	<u>The Psychology of Recreation and Tourism</u>
<u>or PSYC 408-3</u>	<u>Environmental Problems and Human Behaviour</u>
<u>POLS 400-3</u>	<u>Classics in Political Philosophy</u>
<u>or POLS 472-3</u>	<u>Seminar in Political Philosophy</u>
<u>POLS 413-3</u>	<u>Democracy, Citizenship and Human Rights</u>
<u>or POLS 415-3</u>	<u>Comparative Northern Development</u>

One of:

NRES 421-1 Professional Writing  
and NRES 422-2 Undergraduate Report  
OR  
NRES 430-6 Undergraduate Thesis

### **Elective and Academic Breadth**

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours including any additional credit hours necessary to meet the Academic Breadth requirement of the University (see Academic Regulation 15).

An executive summary of the proposed changes to the BCMB Curriculum was included for information.

### **S-201301.07**

#### **Changes to Program Requirements — Biochemistry and Molecular Biology**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change(s) to the BCMB program description, on pages 77-79 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

## **Biochemistry & Molecular Biology (BSc Program)**

Biochemistry and Molecular Biology (BCMB) investigates how molecules work in living systems. There is no clear line dividing living from non-living systems; rather, there is a gradual increase in complexity from clearly inanimate molecules up to obviously complex organisms. The goal of biochemistry and molecular biology is to

understand how simple, inanimate molecular interactions support life and how living systems are shaped by their molecular foundation. The BCMB degree has two main components: learning about molecules, and learning about the scientific method. The former involves acquiring expertise in the foundations of biochemistry, such as organic and physical chemistry, and then exploring biological molecules and how they operate in living systems. The latter involves exploring how science asks questions to understand the workings of nature, while developing competence in laboratory skills and analysis. These two aspects are linked in that understanding how information is acquired is as important as the information itself, since different experimental systems can yield different insights into complex biological problems.

BCMB majors continue on to successful careers in a diverse range of fields, notably medicine, teaching, pharmacy, the biotechnology industry, science policy, and law. BCMB majors acquire strong skills in laboratory techniques, and are therefore qualified for many kinds of research positions, including graduate programs such as immunology, molecular genetics, and developmental biology. For students with interests in human health but not necessarily its molecular basis, UNBC also offers a degree in Health Science (the BHSc degree), which focuses on the social determinants of health and how health care is delivered. BCMB majors are encouraged to pursue their interests by combining the BCMB degree with minors in other fields, such as computer science, physics, business, or education.

## Major in Biochemistry and Molecular Biology

The major in Biochemistry and Molecular Biology requires students to take at least ~~85~~74 credit hours of Biochemistry and Molecular Biology-oriented courses, of which ~~42~~33 credit hours must be ~~upper-division~~ upper division (i.e., 300 or 400 level). The minimum requirement for completion of a Bachelor of Science with a major in Biochemistry and Molecular Biology is ~~429~~127 credit hours.

### Program Requirements

#### Lower-Division Requirement

##### 100 Level

BIOL 101-4 Introductory Biology I

BIOL 102-4 Introductory Biology II

CHEM 100-3 General Chemistry I

CHEM 101-3 General Chemistry II

CHEM 120-1 General Chemistry Lab I

CHEM 121-1 General Chemistry Lab II

PHYS 100-4 Introduction to Physics I

or PHYS 110-4 Introductory Physics I: Mechanics

PHYS 101-4 Introduction to Physics II

or PHYS 111-4 Introductory Physics II: Waves & Electricity

One of the following three options:

MATH 100-3 Calculus I

and MATH 101-3 Calculus II

or

MATH 105-3 Enriched Calculus

and MATH 101-3 Calculus II

or

MATH 150-3 Finite Mathematics for Business and Economics

and MATH 152-3 Calculus for Non-majors

Students are strongly encouraged to take MATH 100-3 or

MATH 105-3, and MATH 101-3, for the first-year Mathematics

requirement.

##### 200 Level

~~BIOL 201-3 Ecology~~

BIOL 203-3 Microbiology

BIOL 210-3 Genetics

CHEM 201-3 Organic Chemistry I

CHEM 203-3 Organic Chemistry II

CHEM 204-3 Introductory Biochemistry

CHEM 250-1 Organic Chemistry Lab I  
CHEM 251-1 Organic Chemistry Lab II  
~~BCMB 255-1 Biochemistry Lab I~~

## **BCMB 255-2 Biochemistry Lab I**

STAT 240-3 Basic Statistics  
or STAT 371-3 Probability and Statistics for Scientists  
and Engineers

### Upper-Division Requirement

300 Level

~~BIOL 311-3 Cell and Molecular Biology~~  
~~BIOL 312-3 Molecular Cell Physiology~~  
~~BIOL 323-3 Evolutionary Biology~~  
BCMB 306-3 Intermediary Metabolism  
~~BCMB 307-3 Proteins~~  
BCMB 308-3 Biochemistry Lab II  
~~BCMB 330-3 Nucleic Acids~~  
BCMB 340-3 Physical Biochemistry

400 Level

~~BIOL 423-3 Molecular Evolution and Ecology~~  
~~BIOL 425-3 Applied Genetics and Biotechnology~~  
BCMB 404-3 Proteins and Enzymology  
~~BCMB 409-3 Enzymology~~

One Four of:

BCMB 401-3 Basic Science of Oncology  
BCMB 402-3 Macromolecular Structure  
BCMB 403-3 Advanced Nucleic Acids  
BCMB 405-3 Special Topics in Biochemistry  
BIOL 312-3 Molecular Cell Physiology  
BIOL 323-3 Evolutionary Biology  
BIOL 423-3 Molecular Evolution and Ecology  
BIOL 425-3 Applied Genetics and Biotechnology

### Subject Requirements

Twelve additional credit hours chosen from the following, of which at least 6 credit hours must be at the 300 or 400 level:

Any 200-level or above BCMB, BIOL or CHEM courses

CPSC 450-3 Bioinformatics

HHSC 301-3 Pathophysiology

~~HHSC 430-3 Toxicology and Environmental Health~~

PSYC 317-3 Psychobiology

PSYC 318-3 Sensation and Perception

PSYC 419-3 Neuropsychology

Note: NRES 430-6 can count towards this requirement with permission of the Program Chair.

### Elective and Academic Breadth

Elective credit hours as necessary to ensure completion of ~~120~~ 127 credit hours including any additional credit hours necessary to meet the Academic Breadth requirement of the University (see Academic Regulation 15).

Note: no more than 3 credit hours of continuing education courses may be used towards the BCMB major.

#### **S-201301.08**

#### **Changes to Program Requirements — Biochemistry and Molecular Biology (Honours Degree)**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change(s) to the degree description for the BCMB Honours Degree, on page 78 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

# BSc Honours – Biochemistry and Molecular Biology

The BSc Honours in Biochemistry and Molecular Biology offers students a higher level of specialization and research experience, especially for students planning to pursue postgraduate work.

Honours students ~~are required to~~ must complete the degree requirements for the BSc – Biochemistry and Molecular Biology Major. In addition to the total number of credit hours required for the Biochemistry and Molecular Biology Major, each student must complete 6 credit hours of undergraduate thesis course work, normally of BCMB 430-6, under the supervision of a faculty member. Another undergraduate thesis course

can be substituted with approval of the BCMB Curriculum Chair. Students may apply to the BCMB Honours Program after completion of 60 credit hours in the Biochemistry and Molecular Biology major with a Cumulative GPA of not less than 3.33. Meeting these minimum requirements does not guarantee entry to the Honours Program. Entrance to the Honours Program in Biochemistry and Molecular Biology is at the discretion of the BCMB Program, and is contingent on the availability of a faculty member willing to supervise the undergraduate research thesis.

~~The Honours program is available after completed 60 credit hours in the Biochemistry and Molecular Biology Major and attaining a Cumulative GPA of not less than 3.33. Attaining the minimum requirement will not guarantee admission to the Honours program, which will be at the discretion of the Program and contingent on the availability of a faculty member willing to supervise the research thesis.~~ Maintenance of a Cumulative GPA of 3.33 is required to remain in the Honours ~~p~~Program.

The minimum requirement for completion of a BSc Honours – Biochemistry and Molecular Biology is ~~43~~ 133 credit hours.

## **S-201301.09**

### **Changes to Program Requirements — Biochemistry and Molecular Biology (Minor)**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the changes to the minor requirements for BCMB, on pages 78-79 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

A Senator noted that, on page 91 of 225 of the Senate meeting package, there were two numbers that needed to be corrected. First, in the second-last line of the first paragraph under the heading “2. Proposed revision with changes underlined and deletions indicated clearly:” the phrase “41 credit hours” should be changed to “42 credit hours.” Second, the course “BCMB 255-1” listed under the heading “200 level” should be changed to “BCMB 255-2.”

CARRIED.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

The minor in Biochemistry and Molecular Biology is designed to provide students with a core of study in the field of Biochemistry and Molecular Biology. The program of study includes a grounding in chemistry and biology since these are the disciplines from which modern biochemistry and molecular biology arose. The minimum requirement for completion of the minor in Biochemistry and Molecular Biology is ~~44~~ 42 credit hours, of which at least 12 credit hours must be at the upper-division level.

100 Level

BIOL 101-4 Introductory Biology I

BIOL 102-4 Introductory Biology II

CHEM 100-3 General Chemistry I

CHEM 101-3 General Chemistry II

CHEM 120-1 General Chemistry Lab I

CHEM 121-1 General Chemistry Lab II

200 Level

BIOL 210-3 Genetics

CHEM 201-3 Organic Chemistry I

CHEM 203-3 Organic Chemistry II

Note: Students are allowed to double-count all applicable first- and second-year courses; however, they must take upper-division courses for the minor that are not included in their major requirements or upper-division subject requirements to ensure completion of 12 upper-division credit hours outside of their major. Students must ensure that all prerequisites are fulfilled prior to taking a course at the 300 and 400 Level

12 credit hours must be chosen from the following:

BCMB 306-3 Intermediary Metabolism

~~BCMB 307-3 Proteins~~

BCMB 308-3 Biochemistry Lab II

~~BCMB 330-3 Nucleic Acids~~

BCMB 340-3 Physical Biochemistry

BCMB 401-3 Basic Science of Oncology

BCMB 402-3 Macromolecular Structure

BCMB 403-3 Advanced Nucleic Acids

BCMB 404-3 Proteins and Enzymology

BCMB 405-3 Topics in Biochemistry and Molecular Biology

~~BCMB 409-3 Enzymology~~

BIOL 311-3 Cell and Molecular Biology

BIOL 312-3 Molecular Cell Physiology

BIOL 323-3 Evolutionary Biology

BIOL 423-3 Molecular Evolution and Ecology

BIOL 425-3 Applied Genetics and Biotechnology

CHEM 405-3 Topics in Biochemistry

#### **S-201301.10**

##### **Course Deletion — BCMB 307-3**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the course BCMB 307-3 Proteins, on page 194 of the 2012/2013 undergraduate calendar, be deleted as proposed.

Effective date: September 2013

CARRIED (consent agenda).

#### **S-201301.11**

##### **Course Deletion — BCMB 330-3**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the course BCMB 330-3 Nucleic Acids, on page 194 of the 2012/2013 undergraduate calendar, be deleted as proposed.

Effective date: September 2013

CARRIED (consent agenda).

#### **S-201301.12**

##### **Course Deletion — BCMB 409-3**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the course BCMB 409-3 Proteins, on page 195 of the 2012/2013 undergraduate calendar, be deleted as proposed.

Effective date: September 2013

CARRIED (consent agenda).

#### **S-201301.13**

##### **New Course Approval — BCMB 404-3**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the new course BCMB 404-3 Proteins and Enzymology be approved as proposed.

Proposed semester of first offering: January 2014

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

This lecture-based course provides knowledge of contemporary protein biochemistry and emphasizes the importance and role of enzymes in biochemistry and molecular biology. Topics include the structure and function of proteins, protein biotechnology, mechanisms of enzyme action, kinetic analysis of enzymes and regulation of protein activity.

**Prerequisites:** CHEM 204 with a minimum grade of C

**Preclusions:** BCMB 409

#### **S-201301.14**

##### **Changes to Course Credit Hours — BCMB 255-1**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the changes to the course credit hours for BCMB 255-1 be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

~~BCMB 255-1~~ **BCMB 255-2 Biochemistry Lab I** This is a laboratory-based course in which students explore basic biochemical and molecular biological laboratory techniques. Topics include buffers, calculations in biochemistry, enzyme kinetics, and ~~carbohydrates and protein purification~~ purification of carbohydrates and proteins. Techniques include centrifugation, chromatography, spectrophotometry, and electrophoresis.

#### **S-201301.15**

##### **New Course Approval — ENSC 303-3**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the new course ENSC 303-3 Energy Systems and Sustainability be approved as proposed.

Proposed semester of first offering: September 2014

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

This course provides an overview of where our energy comes from, the services we derive from energy use, such as heat, motion, and light, and the environmental implications of increasing energy demand. Topics include electricity and fuel production, energy demand for buildings, transportation and industry, and the potential of electrification and energy efficiency to reduce energy demand. The course examines future energy scenarios that limit greenhouse gas emissions through both changes in how energy is used and the integration of low-carbon energy sources.

**Prerequisites:** 30 credit hours

An executive summary of the proposed changes to the ORTM Curriculum was included for information.

#### **S-201301.16**

##### **Changes to Program Requirements — BA in Nature-Based Tourism Management**

Ryan

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the program requirements for the BA in Nature-Based Tourism Management and the Minor in Outdoor Recreation and Tourism Management, on pages 164-166 of the 2012/2013 undergraduate calendar, be revised as proposed.

Effective date: September 2013

It was noted that another motion associated with these two motions (to change the breadth requirement for ORTM) had been postponed at the last meeting of the Senate Committee on Academic Policy and Planning (SCAPP) as a result of there being nobody from the program in attendance to respond to questions. It was thus asked whether this motion should also be postponed until that motion was dealt with by SCAPP. It was subsequently decided that the motion need not be postponed, but the following motion was proposed:

**S-201301.16A:**

Ryan / Zahir

That the section regarding the breadth requirement (on page 122 of 225 of the Senate meeting package) not be stricken from the calendar text as requested until the associated motion to change the breadth requirement is approved by Senate.

CARRIED.

A Senator from the Department of Geography noted that many of the titles for the Geography courses in the updated calendar text being proposed were out of date. The Program Chair agreed to make these revisions.

The main motion, with the approved amendments to the calendar text, was also CARRIED.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

**Nature-Based Tourism Management  
(BA Program)**

Website: [www.unbc.ca/ortm](http://www.unbc.ca/ortm)

Tourism has become the largest industry and employer in the world. One of the most important and fastest growing sectors in tourism is nature-based tourism, which comprises attractions, activities and experiences involving interaction with natural and cultural resources (e.g., ecotourism, adventure tourism, indigenous tourism). This degree examines the various components of the nature-based tourism system, giving emphasis to the entrepreneurial perspectives and sustainability issues in the industry. Reflecting the interdisciplinarity of the field, and related career directions, students select from the following Areas of Specialization: marketing and entrepreneurship, outdoor education and leadership, indigenous/cultural tourism, or environment and society. ~~Students also choose to specialize in other content areas and disciplines closely related to nature-based tourism, such as tourism marketing, indigenous tourism, geography, international studies, environmental planning, political science, and natural resource management.~~

Major in Nature-Based Tourism Management

~~Undergraduate students are required to complete a minimum of thirteen (13) Outdoor Recreation & Tourism Management courses (39 credit hours).~~

Students must complete a minimum of 120 credit hours through (a) the common degree requirements, (b) the requirements of an Area of Specialization and (c) elective credit hours in any subject.

~~The minimum requirement for completion of a Bachelor of Arts with a major in Nature-Based Tourism Management is 122 credit hours.~~

**Program Requirements - Common Degree Requirements**

Lower-Division Requirement

100 Level

BIOL 110-3     Introductory Ecology  
COMM 100-3    Introduction to Canadian Business  
ECON 100-3    Microeconomics  
ENPL 104-3    Introduction to Planning  
GEOG 100-3    Environments and People: The Geography of Natural Hazards  
                  or GEOG 101-3 Human Geographies of Global Change  
                  or FNST 100-3 The Aboriginal Peoples of Canada  
                  or ENV5 101-3 Introduction to Environmental Citizenship  
NREM 100-3\*   Field Skills  
ORTM 100-3   ~~Leisure in Life~~ Foundations of Outdoor Recreation and Tourism

~~Students with little or no computer experience are strongly encouraged to take CPSC 150-3 or CPSC 110-3.~~

\*Note: Applications for exemption from NREM 100-3 must be made within the first year of study in any Natural

Resource Management major.

200 Level

~~COMM 230-3 Organizational Behaviour~~  
~~COMM 240-3 Introduction to Marketing~~  
~~ECON 205-3 Statistics for Social and Management Sciences~~  
~~or STAT 240-3 Basic Statistics~~  
~~ORTM 200-3 Sustainable Recreation and Tourism~~  
~~ORTM 202-3 Ecotourism and Adventure Tourism~~  
~~ORTM 204-3 Visitor Behaviour~~  
~~ORTM 205-3 Outdoor Skills and Leadership~~

Two of:

~~ENPL 204-3 Principles and Practices of Planning~~  
~~ENPL 205-3 Environment and Society~~  
~~ENPL 208-3 First Nations Community and Environmental Planning~~  
~~FNST 217-3 Contemporary Challenges Facing Aboriginal Communities~~  
~~GEOG 200-3 Geography of BC~~  
~~INTS 307-3 Global Resources~~  
~~GEOG 204-3 Introduction to GIS for the Social Sciences~~  
~~or GEOG 205-3 Cartography and Geomatics~~  
~~INTS 205-3 Introduction to International Studies~~  
~~NREM 210-4 Integrated Resource Management~~

### Upper-Division Requirement

Nine credit hours from\*\*:

~~ORTM 305-3 Protected Areas Planning and Management~~  
~~ORTM 332-3 Outdoor Education and Leadership~~  
~~ORTM 400-3 Conservation Area Design and Management~~  
~~ORTM 403-3 International Dimensions in Recreation and Tourism~~  
~~ORTM 407-3 Recreation, Tourism and Communities~~  
~~ORTM 408-3 The Psychology of Recreation and Tourism~~  
~~ORTM 414-3 Polar Tourism and Recreation~~  
~~ORTM 433 (1-6) Field School II~~  
~~ORTM 440 (2-6) Internship~~  
~~ORTM 498 (1-3) Special Topics~~  
~~ORTM 499 (1-6) Independent Study~~  
~~NOLS 300-2 Environmental Ethics, Leave No Trace and Leadership~~  
~~NOLS 301-2 Group Leadership Techniques~~  
~~NOLS 302 (2-6) Wilderness Skills Practicum~~  
~~NOLS 303-2 Risk Management, Assessment and Decision Making~~  
\*\*Note: Up to 6 credit hours of NOLS prefixed courses can count towards this category. Any additional NOLS credit hours can be used as elective credit.

300 Level

~~COMM 302-3 Entrepreneurship~~  
~~COMM 342-3 Services Marketing~~  
~~COMM 343-3 Behavioural Marketing~~  
~~FNST 304-3 First Nations Environmental Philosophy and Knowledge~~  
~~or NREM 303-3 First Nations' Approaches to Resource Management~~  
~~HIST 360-3 An Introduction to Environmental History~~  
~~ORTM 300-3 Recreation and Tourism Impacts~~  
~~ORTM 301-3 Environmental Interpretation~~  
~~ORTM 306-3\*\* Indigenous Tourism and Recreation~~  
~~ORTM 332-3 Outdoor, Environmental and Experiential Education~~  
~~ORTM 333-3 Field School~~  
~~ORTM 310-3 Research Methods and Analysis~~

One of:

~~ENPL 305-3 Environmental Impact Assessment~~  
~~ENPL 313-3 Rural Community Economic Development~~  
~~GEOG 300-3 Geographic Information Systems~~

INTS 307-3 — Global Resources  
NREM 306-3 — Society, Policy and Administration  
POLS 332-3 — Community Development  
ENVS 325-3 — Global Environmental Change: Science and Policy

400 Level

ORTM 410-3 — Research Methods and Analysis  
ORTM 412-3 — Issues and Trends in Recreation and Tourism

Nine credit hours from\*:

ORTM 305-3 — Protected Areas Planning and Management  
ORTM 400-3 — Conservation Area Design and Management  
ORTM 403-3\*\* — International Dimensions in Recreation and Tourism  
ORTM 407-3\*\* — Recreation, Tourism and Communities  
ORTM 408-3\*\* — The Psychology of Recreation and Tourism  
ORTM 409-3\*\* — Critical Approaches to Outdoor Recreation Activities  
ORTM 414-3\*\* — Polar Tourism and Recreation  
ORTM 433-(1-6) — Field School II  
ORTM 440-(2-6) — Internship  
ORTM 498-(1-3) — Special Topics  
ORTM 499-(1-6) — Independent Study  
NOLS 300-2 — Environmental Ethics, Leave No Trace and Leadership  
NOLS 301-2 — Group Leadership Techniques  
NOLS 302-(2-6) — Wilderness Skills Practicum  
NOLS 303-2 — Risk Management, Assessment and Decision Making

\*Note: Up to 6 credit hours of NOLS prefixed courses can count towards this category. Any additional NOLS credit hours can be used as elective credit.

\*\*Note: Students should note that some senior-level ORTM classes are offered in alternating years.

Two of:

COMM 441-3 — International Marketing  
COMM 442-3 — Marketing Strategy  
COMM 449-3 — Advanced Topics in Marketing  
ENPL 409-3 — Advanced First Nations Community and Environmental Planning  
ENPL 410-3 — Land Use Planning  
GEOG 401-3 — Resource Geography  
GEOG 403-3 — Aboriginal Geography  
INTS 407-3 — International Environmental Policy  
NREM 400-3 — Natural Resources Planning  
NREM 411-3 — Environmental and Professional Ethics  
POLS 401-3 — Resource Politics  
POLS 434-3 — Resource Communities in Transition

### **Area of Specialization**

Students must choose one of the following Areas of Specialization. Courses used to fulfill common degree requirements above may not be used to satisfy an Area of Specialization requirement.

1. Marketing and Entrepreneurship
2. Outdoor Education and Leadership
3. Indigenous Cultural Tourism
4. Environment and Society

### **Marketing and Entrepreneurship**

COMM 210-3 — Financial Accounting  
COMM 342-3 — Services Marketing

Two of:

COMM 340-3 — Marketing Communication  
COMM 343-3 — Behavioural Marketing  
COMM 346-3 — Internet Marketing  
COMM 441-3 — International Marketing

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COMM 442-3 Marketing Strategy

Two of:

- COMM 230-3 Organization Behaviour
- COMM 300-3 Introduction to Business Law
- COMM 303-3 Introduction to International Business
- COMM 443-3 Marketing Research
- ECON 305-3 Environmental Economics and Environmental Policy
- GEOG 424-3 Social Geography of Northern Communities

**Outdoor Education and Leadership**

- EDUC 101-3 Introduction to Education
- EDUC 201-3 Education Theory and Practice
- ENVS 101-3 Introduction to Environmental Citizenship
- ORTM 408-3\*\* The Psychology of Recreation and Tourism
- ORTM 409-3\*\* Critical Approaches to Outdoor Recreation Activities

One of:

- ANTH 405-3 Landscapes, Place and Culture
- BIOL 350-3 Ethnobotany
- BIOL 333-3 Field School
- ENVS 306-3 Human Ecology
- ENVS 325-3 Global Environmental Change: Science and Policy
- HIST 421-(3-6) Topics in Environmental History
- NREM 333-3 Field Applications in Resource Management

**Indigenous/Cultural Tourism**

- FNST 100-3 The Aboriginal Peoples of Canada  
or HIST 110-3 Indigena
- FNST 203-3 Introduction to Traditional Environmental Knowledge

One of:

- FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples
- FNST 217-3 Contemporary Challenges Facing Aboriginal Communities
- ENPL 208-3 First Nations Community and Environmental Planning

Two of:

- BIOL 350-3 Ethnobotany
- ENPL 409-3 Advanced First Nations Community and Environmental Planning
- GEOG 301-3 Cultural Geography
- GEOG 403-3 Aboriginal Geography
- HIST 330-3 Lectures in Indigenous History
- NORS 321-3 Peoples and Cultures of the Circumpolar World  
or HIST 354-3 The Circumpolar World
- POLS 332-3 Community Development

One of:

- ORTM 403-3\*\* International Dimensions in Recreation and Tourism
- ORTM 407-3\*\* Recreation, Tourism and Communities
- ORTM 414-3\*\* Polar Tourism and Recreation

**Environment and Society**

- ENVS 101-3 Introduction to Environmental Citizenship
- ENPL 205-3 Environment and Society  
or ENPL 208-3 First Nations Community and Environmental Planning

One of:

- GEOG 204-3 Introduction to GIS for the Social Sciences
- GEOG 205-3 Cartography and Geomatics
- GEOG 300-3 Geographic Information Systems

One of:

ENPL 304-3	Mediation, Negotiation and Public Participation
ENVS 326-3	Natural Resources, Environmental Issues and Public Engagement
NREM 306 -3	Society, Policy and Administration

Two of:

ENPL 301-3	Sustainable Communities: Structure and Sociology
ENVS 306-3	Human Ecology
ENVS 309-3	Gender and Environmental Studies
GEOG 305-3	Political Ecology
ANTH 405-3	Landscapes, Place and Culture
GEOG 420-3	Geographies of Environmental Justice
GEOG 424-3	Social Geography of Northern Communities
HIST 421-(3-6)	Topics in Environmental History

## Course Prerequisites

Students should review all proposed course selections in advance to make sure course prerequisites are taken where needed.

### ~~\*\*Electives and Academic Breadth~~

~~Electives at any level in any subject sufficient to ensure completion of a minimum of 1220 credit hours including any additional credits necessary to meet the Academic Breadth requirement of the University (see Academic Regulation 15).~~

~~\*\*NOTE: The text proposed for this section was the following; however, by motion of Senate (motion S-201301.16A), it will not be revised until an associated motion to change the breadth requirement is approved by Senate:~~

### ~~Electives and Academic Breadth~~

~~Electives at any level in any subject sufficient to ensure completion of a minimum of 1220 credit hours including any additional credits necessary to meet the Academic Breadth requirement of the University (see Academic Regulation 15).~~

### ~~Optional Streams~~

~~The following streams in the Nature-Based Tourism degree provide students with the opportunity to focus course selections, towards possible career options. Students are not required to follow these particular streams. Courses with NOLS prefixes in the Outdoor Education and Leadership stream are taught through a partnership agreement with the National Outdoor Leadership School (NOLS). Students must enrol in a NOLS field-based program in order to access these courses, and there are additional tuition costs for such a program.~~

#### ~~Tourism Marketing Stream~~

~~COMM 100-3 Introduction to Canadian Business  
ECON 100-3 Microeconomics  
COMM 230-3 Organizational Behaviour  
COMM 240-3 Introduction to Marketing  
COMM 302-3 Entrepreneurship  
COMM 342-3 Services Marketing  
COMM 343-3 Behavioural Marketing  
ORTM 408-3 The Psychology of Recreation and Tourism~~

~~At least two of:~~

~~COMM 441-3 International Marketing  
COMM 442-3 Marketing Strategy  
COMM 449-3 Advanced Topics in Marketing~~

#### ~~Indigenous/Cultural Tourism Stream~~

~~FNST 100-3 The Aboriginal Peoples of Canada  
FNST 217-3 Contemporary Challenges Facing Aboriginal Communities  
ENPL 208-3 First Nations Community and Environmental Planning  
NREM 303-3 First Nations' Approaches to Resource Management  
ORTM 306-3 Indigenous Tourism and Recreation  
POLS 332-3 Community Development  
ENPL 409-3 Advanced First Nations Community and Environmental Planning  
GEOG 403-3 Aboriginal Geography~~

DELETE

~~ORTM 403-3 International Dimensions in Recreation and Tourism~~  
~~ORTM 407-3 Recreation, Tourism and Communities~~  
~~ORTM 414-3 Polar Tourism and Recreation~~

~~Outdoor Education and Leadership Stream~~

~~ENVS 101-3 Introduction to Environmental Citizenship~~  
~~EDUC 101-3 Introduction to Education~~  
~~EDUC 201-3 Education Theory and Practice~~  
~~ORTM 202-3 Ecotourism and Adventure Tourism~~  
~~ORTM 301-3 Environmental Interpretation~~  
~~ORTM 332-3 Outdoor Education and Leadership~~  
~~ORTM 333-3 Field School~~  
~~ORTM 433-(1-6) Field School II~~  
~~NOLS 100-4 Natural History of Regional Ecosystems~~  
~~NOLS 300-2 Environmental Ethics, Leave No Trace and Leadership~~  
~~NOLS 301-2 Group Leadership Techniques~~  
~~NOLS 302 (2-6) Wilderness Skills Practicum~~  
~~NOLS 303-2 Risk Management, Assessment and Decision Making~~

**BA Honours – Nature-Based Tourism Management**

The Honours in Nature-Based Tourism Management offers students a higher level of education and substantial research experience for proceeding to postgraduate studies.

~~To be admitted to enter the Honours degree pProgram~~, students must have completed 60 credit hours and obtained a minimum Cumulative GPA of 3.33. Attaining the minimum requirement will not guarantee ~~admission~~ entry into the Honours pProgram, which will be at the discretion of the Outdoor Recreation and Tourism Management Program. Maintenance of a Cumulative GPA of 3.33 is required to remain in the Honours pProgram.

Honours students ~~are required to~~ must complete the degree requirements for the BA in Nature-Based Tourism Management. In addition, each student must also complete an additional 6 credit hours in the form of an undergraduate thesis (NRES 430-6) under the supervision of a faculty member.

Note: Students are responsible to find their own undergraduate thesis research supervisor. Faculty members are under no obligation to supervise ~~a~~ Honours students.

**Minor in Outdoor Recreation and Tourism Management**

The minor in Outdoor Recreation and Tourism Management is designed to afford students an opportunity to gain foundational knowledge in tourism and recreation while pursuing another major. The minor requires students to take a total of 18 credit hours. The minor has three required courses basic to the field of Outdoor Recreation and Tourism Management (~~nine 9~~ credit hours) and a set of elective courses (minimum of ~~nine 9~~ credit hours). A maximum of two courses (~~six 6~~ credit hours) used to fulfill program requirements for a major (or another minor) may also be used to fulfill requirements for this minor.

Required Courses

~~ORTM 100-3 Leisure in Life~~ Foundations of Outdoor Recreation and Tourism

One of:

~~ORTM 200-3 Sustainable Recreation and Tourism~~  
~~ORTM 202-3 Ecotourism and Adventure Tourism~~  
ORTM 205-3 Outdoor Skills and Leadership  
~~ORTM 204-3 Visitor Behavior~~  
~~ORTM 300-3 Recreation and Tourism Impacts~~

Elective Courses

Nine credit hours from the following list with a minimum of ~~six 6~~ credit hours at the 400 level:

~~ORTM 301-3 Environmental Interpretation~~  
~~ORTM 305-3 Protected Area Planning and Management~~  
~~ORTM 306-3 Indigenous Tourism and Recreation~~  
ORTM 332-3 Outdoor, Education and Leadership-Environmental, and Experiential Education

ORTM 403-3	International Dimensions in Recreation and Tourism
ORTM 407-3	Recreation, Tourism and Communities
ORTM 408-3	The Psychology of Recreation and Tourism
ORTM 412-3	Issues and Trends in Recreation and Tourism
ORTM 414-3	Polar Tourism and Recreation
ORTM 409-3	<u>Critical Approaches to Outdoor Recreation Activities</u>

### **S-201301.17**

#### **Changes to Program Requirements — BSc Natural Resources Management (Major in Outdoor Recreation and Conservation and Minor in Forest Recreation)**

Ryan

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the program requirements for the BSc Natural Resources Management (Major in Outdoor Recreation and Conservation and the Minor in Forest Recreation), on pages 159-161, 162 of the 2012/2013 undergraduate calendar, be revised as proposed.

Effective date: September 2013

It was noted that another motion associated with these two motions (to change the breadth requirement for ORTM) had been postponed at the last SCAPP meeting as a result of there being nobody from the program in attendance to respond to questions. It was thus asked whether this motion should also be postponed until that motion was dealt with by SCAPP. It was subsequently decided that the motion need not be postponed, but the following motion was proposed:

### **S-201301.17A:**

Ryan / Deo

That the section regarding the breadth requirement (on page 134 of 225 of the Senate meeting package) not be stricken from the calendar text as requested until the associated motion to change the breadth requirement is approved by Senate.

CARRIED.

A Senator from the Department of Geography noted that many of the titles for the Geography courses in the updated calendar text being proposed were out of date. The Program Chair agreed to make these revisions.

The main motion, with the approved amendments to the calendar text, was also CARRIED.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

### **Major in Outdoor Recreation and Conservation**

This BSc Major in Outdoor Recreation and Conservation focuses on the natural and ~~social~~ human dimensions of outdoor recreation and conservation planning and management within an integrated natural resource management framework. Emphasis in this major is placed on planning and managing environmentally and culturally sensitive recreation and conservation opportunities in natural environment settings.

Northern British Columbia provides an unparalleled setting for learning, teaching, and researching the various aspects of outdoor recreation and conservation management. British Columbia has a large land base and a range of natural environments that support a vast array of dispersed and concentrated outdoor recreation opportunities. The program examines the components of planning and managing recreation opportunities through the study of such subject areas as ecology, integrated resource management, planning, protected areas management, ~~tourism management~~, environmental studies and geography (e.g., GIS).

~~Undergraduate students are required to take a minimum of 12 Outdoor Recreation and Tourism Management courses (36 credit hours). Of these, 9 courses are upper division.~~

Students must complete a minimum of 120 credit hours through (a) the common degree requirements, (b) the Area of Specialization requirements and (c) elective credit hours in any subject.

~~The minimum requirement for the completion of a Bachelor of Science with a major in Outdoor Recreation and Conservation is 120 credit hours.~~

## **Program Requirement Common Degree Requirements**

### **Lower-Division Requirement**

#### **100 Level**

BIOL 101-4 Introductory Biology I  
BIOL 102-4 Introductory Biology II  
CHEM 100-3 General Chemistry I  
CHEM 101-3 General Chemistry II  
or PSYC 101-3 Psychology as a Science  
or PHYS 100-4 Introduction to Physics I  
ECON 100-3 Microeconomics  
or ENVS 101-3 Introduction to Environmental Citizenship  
or FNST 100-3 The Aboriginal Peoples of Canada  
or GEOG 100-3 Environments and People: The Geography of Natural Hazards  
NREM 100-3\* Field Skills  
ORTM 100-3 Leisure in Life Foundations of Outdoor Recreation and Tourism Management

~~Students with little or no computer experience are strongly encouraged to take CPSC 150-3 or CPSC 110-3.~~

\*Note: Applications for exemption from NREM 100-3 must be made within the first year of study in any Natural Resource Management major.

#### **200 Level**

BIOL 201-3 Ecology  
ECON 205-3 Statistics for the Social and Management Sciences  
or STAT 240-3 Basic Statistics  
GEOG 204-3 Introduction to GIS for the Social Sciences  
or ~~GEOG 205-3 Cartography and Geomatics~~  
or GEOG 300-3 Geographic Information Systems  
NREM 203-3 Resource Inventories and Measurements  
or NREM 204-3 Introduction to Wildlife and Fisheries  
or GEOG 210-3 Geomorphology  
NREM 210-4 Integrated Resource Management  
ORTM 200-3 Sustainable Recreation and Tourism  
ORTM 205-3 Outdoor Skills and Leadership  
~~ORTM 204-3 Visitor Behaviour~~

### **Upper-Division Requirement**

Six credit hours from the following:

~~ORTM 306-3 Indigenous Tourism and Recreation~~  
~~ORTM 332-3 Outdoor Education and Leadership~~  
~~ORTM 403-3 International Dimensions in Recreation and Tourism~~  
~~ORTM 407-3 Recreation, Tourism and Communities~~  
~~ORTM 408-3 The Psychology of Recreation and Tourism~~  
~~ORTM 414-3 Polar Tourism and Management~~  
~~ORTM 433 (1-6) Field School II~~  
~~ORTM 440 (2-6) Internship~~  
~~ORTM 498 (1-3) Special Topics~~  
~~ORTM 499 (1-6) Independent Study~~  
~~NOLS 300-2 Environmental Ethics, Leave No Trace and Leadership~~  
~~NOLS 301-2 Group Leadership Techniques~~  
~~NOLS 302 (2-6) Wilderness Skills Practicum~~  
~~NOLS 303-2 Risk Management, Assessment and Decision Making~~

~~Only 3 credit hours of any combination of ORTM 332, ORTM 433, ORTM 440, ORTM 498, ORTM 499 and NOLS prefixed courses can count towards this category. Any additional credit can be used as elective credit.~~

#### **300 Level**

~~ENPL 305-3 Environmental Impact Assessment~~  
NREM 303-3 First Nations' Approaches to Resource Management  
or FNST 304-3 First Nations Environmental Philosophy and Knowledge

~~NREM 306-3 Society, Policy and Administration~~  
~~ORTM 300-3 Recreation and Tourism Impacts~~  
~~ORTM 301-3 Environmental Interpretation~~  
~~ORTM 305-3 Protected Area Planning and Management~~  
~~ORTM 310-3 Research Methods and Analysis~~  
~~ORTM 332-3 Outdoor, Environmental, and Experiential Education~~  
~~ORTM 333-3 Field School~~

One of:

~~BIOL 301-3 Systematic Botany~~  
~~or FSTY 201-4 Plant Systems~~  
~~BIOL 307-3 Ichthyology and Herpetology~~  
~~BIOL 308-3 Ornithology and Mammalogy~~  
~~GEOG 300-3 Geographic Information Systems~~

#### **400 Level**

~~NREM 400-4 Natural Resources Planning~~  
~~NREM 411-3 Environmental and Professional Ethics~~  
~~ORTM 400-3 Conservation Area Design and Management~~  
~~ORTM 410-3 Research Methods and Analysis~~  
~~ORTM 412-3 Issues and Trends in Recreation and Tourism~~

One of:

~~BIOL 404-3 Plant Ecology~~  
~~BIOL 411-3 Conservation Biology~~  
~~BIOL 412-3 Wildlife Ecology~~  
~~BIOL 420-3 Animal Behaviour~~  
~~ENVS 325-3 Global Environmental Change: Science and Policy~~  
~~NREM 410-3 Watershed Management~~  
~~GEOG 432-3 Remote Sensing~~

Two of: Six credit hours from the following:

~~ORTM 306-3\* Indigenous Tourism and Recreation~~  
~~ORTM 332-3 Outdoor Education and Leadership~~  
~~ORTM 403-3\* International Dimensions in Recreation and Tourism~~  
~~ORTM 407-3\* Recreation, Tourism and Communities~~  
~~ORTM 408-3\* The Psychology of Recreation and Tourism~~  
~~ORTM 409-3\* Critical Approaches to Outdoor Recreation Activities~~  
~~ORTM 414-3\* Polar Tourism and Recreation~~  
~~ORTM 433 (1-6) Field School II~~  
~~ORTM 440 (2-6) Internship~~  
~~ORTM 498 (1-3) Special Topics~~  
~~ORTM 499 (1-6) Independent Study~~  
~~NOLS 300-2 Environmental Ethics, Leave No Trace and Leadership~~  
~~NOLS 301-2 Group Leadership Techniques~~  
~~NOLS 302 (2-6) Wilderness Skills Practicum~~  
~~NOLS 303-2 Risk Management, Assessment and Decision Making~~

Only 3 credit hours of any combination of ORTM 332, ORTM 433, ORTM 440, ORTM 498, ORTM 499 and NOLS prefixed courses can count towards this category. Any additional credit can be used as elective credit.

\*Note: Students should note that some senior-level ORTM classes are offered in alternating years.

#### **Area of Specialization**

Students must choose one of the following Areas of Specialization. Courses used to fulfill common degree requirements above may not be used to satisfy an Area of Specialization requirement.

1. Environmental Design and Planning
2. Conservation Education
3. Natural Science
4. Applications of Recreation and Tourism

#### **Environmental Design and Planning**

~~ENPL 104-3 Introduction to Planning~~  
~~ENPL 204-3 Principles and Practices of Planning~~

BIOL 411-3 Conservation Biology

One of:

- ENPL 304-3 Mediation, Negotiation and Public Participation
- ENVS 326-3 Natural Resources, Environmental Issues and Public Engagement
- NREM 306 -3 Society, Policy and Administration

One of:

- ENPL 303-3 Spatial Planning with Geographical Information Systems (GIS)
- ENPL 415-3 Ecological Design
- GEOG 432-3 Remote Sensing
- NREM 410-3 Watershed Management

**Conservation Education**

- EDUC 101-3 Introduction to Education
- EDUC 201-3 Education Theory and Practice
- ENVS 101-3 Introduction to Environmental Citizenship
- ORTM 409-3\* Critical Approaches to Outdoor Recreation Activities

One of:

- FSTY 201-4 Plant Systems
- BIOL 301-3 Systematic Botany
- BIOL 307-3 Ichthyology and Herpetology
- BIOL 308-3 Ornithology and Mammalogy
- ENVS 325-3 Global Environmental Change: Science and Policy

One of:

- BIOL 404-3 Plant Ecology
- BIOL 411-3 Conservation Biology
- BIOL 412-3 Wildlife Ecology
- BIOL 420-3 Animal Behaviour
- GEOG 432-3 Remote Sensing
- NREM 410-3 Watershed Management

**Natural Science**

- NREM 204-3 Introduction to Wildlife and Fisheries
- FSTY 201-4 Plant Systems  
or BIOL 204-3 Plant Biology
- BIOL 411-3 Conservation Biology

Three of:

- BIOL 202-3 Invertebrate Zoology
- BIOL 301-3 Systematic Botany
- BIOL 302-3 Limnology
- BIOL 304-3 Plants, Society and the Environment
- BIOL 307-3 Ichthyology and Herpetology
- BIOL 308-3 Ornithology and Mammalogy
- BIOL 318-3 Fungi and Lichens
- BIOL 322-3 Entomology
- BIOL 333-3 Field School
- BIOL 350-3 Ethnobotany
- BIOL 402-3 Aquatic Plants
- BIOL 404-3 Plant Ecology
- BIOL 412-3 Wildlife Ecology
- BIOL 420-3 Animal Behaviour
- BIOL 421-3 Insects, Fungi and Society
- ENVS 325-3 Global Environmental Change: Science and Policy
- NREM 333-3 Field Applications in Resource Management

**Applications of Recreation and Tourism**

- ORTM 202-3 Ecotourism and Adventure Tourism
- Six credit hours of:
  - ORTM 306-3\* Indigenous Tourism and Recreation

ORTM 403-3\* International Dimensions in Recreation and Tourism  
ORTM 407-3\* Recreation, Tourism and Communities  
ORTM 408-3\* The Psychology of Recreation and Tourism  
ORTM 409-3\* Critical Approaches to Outdoor Recreation Activities  
ORTM 414-3\* Polar Tourism and Recreation  
ORTM 433 (1-6) Field Experience II  
ORTM 440 (2-6) Internship  
ORTM 498 (1-3) Special Topics  
ORTM 499 (1-6) Independent Study

Two of:

BIOL 204-3 Plant Biology  
BIOL 301-3 Systematic Botany  
BIOL 304-3 Plants, Society and the Environment  
BIOL 307-3 Ichthyology and Herpetology  
BIOL 308-3 Ornithology and Mammalogy  
BIOL 318-3 Fungi and Lichens  
BIOL 333-3 Field School  
BIOL 350-3 Ethnobotany  
ENVS 306-3 Human Ecology  
ENVS 325-3 Global Environmental Change: Science and Policy  
NREM 333-3 Field Applications in Resource Management  
BIOL 404-3 Plant Ecology  
BIOL 411-3 Conservation Biology  
BIOL 420-3 Animal Behaviour

DELETE

**\*\*Electives and Academic Breadth**

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours including any additional credits necessary to meet the Academic Breadth requirement of the University (see Academic Regulation 15).

**\*\*NOTE:** The text proposed for this section was the following; however, by motion of Senate (motion S-201301.17A), it will not be revised until an associated motion to change the breadth requirement is approved by Senate:

~~Electives and Academic Breadth Requirements~~

~~Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours including any additional credits necessary to meet the Academic Breadth requirement of the University (see Academic Regulation 15).~~

~~Optional Stream~~

~~The following stream in the Outdoor Recreation and Conservation major provides students with the opportunity to focus course selections towards a leadership and outdoor education career path. Courses with NOLS prefixes are taught through a partnership agreement with the National Outdoor Leadership School (NOLS). Students must enrol in a NOLS field-based program in order to access these courses, and there are additional tuition costs for such a program. Students are not required to follow this particular stream.~~

~~Outdoor Education and Leadership Stream~~

~~ENVS 101-3 Introduction to Environmental Citizenship~~  
~~EDUC 101-3 Introduction to Education~~  
~~EDUC 201-3 Education Theory and Practice~~  
~~ORTM 202-3 Ecotourism and Adventure Tourism~~  
~~ORTM 301-3 Environmental Interpretation~~  
~~ORTM 332-3 Outdoor Education and Leadership~~  
~~ORTM 333-3 Field School~~  
~~ORTM 433 (1-6) Field School II~~  
~~NOLS 100-4 Natural History of Regional Ecosystems~~  
~~NOLS 300-2 Environmental Ethics, Leave No Trace and Leadership~~  
~~NOLS 301-2 Group Leadership Techniques~~  
~~NOLS 302 (2-6) Wilderness Skills Practicum~~  
~~NOLS 303-2 Risk Management, Assessment and Decision Making~~

**BSc Honours – Outdoor Recreation and Conservation**

The Honours in Natural Resource Management (Outdoor Recreation and Conservation) offers students a higher level of education and substantial research experience for proceeding to postgraduate studies.

To be admitted to enter the Honours degree program, students must have completed 60 credit hours and obtained a minimum Cumulative GPA of 3.33. Attaining the minimum requirement will not guarantee admission entry into the Honours program, which will be at the discretion of the Outdoor Recreation and Tourism Management Program. Maintenance of a Cumulative GPA of 3.33 is required to remain in the Honours program.

Honours students are required to complete the degree requirements for the BSc in NRM (Outdoor Recreation and Conservation). In addition, each student must also complete an additional 6 credit hours in the form of an undergraduate thesis (NRES 430-6) under the supervision of a faculty member.

Note: Students are responsible to find their own undergraduate thesis research supervisor. Faculty members are under no obligation to supervise Honours students.

[ENTRY for Major in Wildlife and Fisheries and Minor in Earth Sciences OMITTED]

### **Minor in Forest Recreation**

The Minor in Forest Recreation provides natural resource management students and others with an opportunity to gain a foundation and expertise in the specialized aspects of forest recreation while pursuing another major. The minor requires students to take a total of 18 credit hours. The minor has three required courses basic to the field of Forest Recreation (nine 9 credit hours) and a set of elective courses (minimum of nine 9 credit hours).

#### **Required Courses**

ORTM 100-3 ~~Leisure in Life~~ Foundations of Outdoor Recreation and Tourism  
ORTM 200-3 Sustainable Recreation and Tourism  
ORTM 300-3 Recreation and Tourism Impacts

#### **Elective Courses**

Nine credit hours from the following list with a minimum of ~~three 3~~ three 3 credit hours at the 400 level:

~~ORTM 301-3 Environmental Interpretation~~  
ORTM 202-3 Ecotourism and Adventure Tourism  
ORTM 305-3 Protected Area Planning and Management  
ORTM 306-3 Indigenous Tourism and Recreation  
~~ORTM 332-3 Outdoor Education and Leadership~~  
ORTM 400-3 Recreation and Tourism Ecology, Management and Design  
ORTM 407-3 Recreation, Tourism and Communities  
ORTM 412-3 Issues and Trends in Outdoor Recreation and Tourism  
ORTM 409-3 Critical Approaches to Outdoor Recreation Activities  
ORTM 498-(1-3) Special Topics  
ORTM 499-(1-6) Independent Study

A maximum of two courses (~~six 6~~ six 6 credit hours) used to fulfill program requirements for a major (or another minor) may also be used to fulfill requirements for this minor.

#### **S-201301.18**

##### **Course Deletion — ORTM 204-3**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the course ORTM 204-3 Visitor Behaviour, on page 265 of the 2012/2013 undergraduate calendar, be deleted as proposed.

Effective date: September 2013

CARRIED (consent agenda).

#### **S-201301.19**

##### **Course Deletion — ORTM 301-3**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the course ORTM 301-3 Environmental Interpretation, on page 265 of the 2012/2013 undergraduate calendar, be deleted as proposed.

Effective date: September 2013

CARRIED (consent agenda).

#### **S-201301.20**

##### **New Course Approval — ORTM 205-3**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the new course ORTM 205-3 Outdoor Skills and Leadership be approved as proposed.

Proposed semester of first offering: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

This course focuses on the development of outdoor skills and leadership used in providing travel and recreation experiences in natural settings. Students develop skills in planning and managing outdoor activities. Typical topics include communication, risk management, group dynamics, coaching, leadership styles, and environmental ethics. Students are expected to come with basic personal equipment and outdoor clothing suitable to the season.

#### **S-201301.21**

##### **New Course Approval — ORTM 409-3**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the new course ORTM 409-3 Critical Approaches to Outdoor Recreation Activities be approved as proposed.

Proposed semester of first offering: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

This seminar course critically questions and creatively reconsiders the nature of outdoor recreation activities as related to contemporary, and interrelated, social and environmental issues. The course is firmly grounded in recreation and leisure studies literature offering anthropological, critical, historical, and socio-ecological interpretations of particular activities (e.g., canoeing, rock climbing, mountaineering), and involving concepts such as identity, place, skill, and community. The course may involve practical experiences and field trips to inform academic content, but these are not the focus.

Prerequisites: ORTM 100-3 and any 300-level ORTM course, or permission of the instructor.

#### **S-201301.22**

##### **Changes to Degree Requirements — Bachelor of Health Sciences**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the changes to the degree requirements for the Bachelor of Health Sciences (removal of BCMB 307-3 and move POLS 403-3 from a required course to credit option) be approved as proposed.

Effective date: September 2013

CARRIED.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

## **Page 147, 2012/2013 Calendar 1<sup>st</sup> Column**

### **General Requirements**

To be awarded the BHSc degree, students are required to complete 122 credit hours of University-level courses. This consists of ~~59~~ 56 credit hours of common requirements for all BHSc students, with the remainder coming from the following Majors, and electives:

**Biomedical Studies:** Students take ~~48~~ 45 credit hours of courses from the Biomedical Studies major and ~~45~~ 21 elective credit hours.

**Community and Population Health - Aboriginal and Rural Health:** Students take ~~33~~ 30 credit hours from the common course requirements for both Community and Population Health Majors, as well as a minimum of 12 credit hours (6 specified, 6 with some choice) in Aboriginal and Rural Health-related courses. The remaining ~~48~~ 21 credit hours are obtained from elective credit hours.

**Community and Population Health - Environmental Health:** Students take ~~33~~ 30 credit hours from the common course requirements for both Community and Population Health Majors, as well as a minimum of 12 credit hours (6 specified, 6 with some choice) in Environmental Health-related courses. The remaining ~~48~~ 21 credit hours are obtained from elective credit hours.

**Page 148 2012/2013 Calendar  
1<sup>st</sup> Column**

**4<sup>th</sup> year - ~~12~~ 9 credit hours**

HHSC 451-3	Health Sciences Research Project
HHSC 471-3	Aboriginal Health and Chronic Disease
<del>POLS 403-3</del>	<del>Social and Health Policy and Administration</del>
PSYC 409-3	Advanced Health Psychology

**Major in Biomedical Studies**

Students pursuing a major in Biomedical Studies are required to complete the following ~~48~~ 45 credit hours of courses. It is recommended that students take the courses listed below in the year of study indicated:

**3<sup>rd</sup> and 4th years – ~~9~~ 6 credit hours**

BIOL 311-3	Cell and Molecular Biology
BCMB 306-3	Intermediary Metabolism
<del>BCMB 307-3</del>	<del>Proteins</del>

**Page 149 2012/2013 Calendar  
1st Column**

**Major in Community and Population Health-Aboriginal and Rural Health**

Students must take:

ENPL 313-3	Rural Community Economic Development
FNST 315-3	Aboriginal Health Management

Students must take an additional 6 credit hours from the following list (please note that some of these courses may require additional prerequisites):

ANTH 200-3	Biological Anthropology
ANTH 201-3	Medical Anthropology
ECON 410-3	Health Economics
<del>POLS 403-3</del>	<del>Social and Health Policy and Administration</del>
PSYC 417-3	Behaviour Modification
SOCW 440-3	Social Work and Mental Health
SOCW 441-3	Social Work and Substance Abuse
SOCW 443-3	Medical Social Work

## Major in Community and Population Health-Environmental Health

Students must take:

ENPL 205-3 Environment and Society  
ENSC 308-3 Northern Contaminated Environments

Students must take an additional 6 credit hours from the following list (please note that some of these courses may require additional prerequisites):

ECON 410-3 Health Economics  
ENPL 208-3 First Nations Community and Environmental Planning  
ENPL 304-3 Mediation, Negotiation and Public Participation  
ENVS 306-3 Human Ecology  
HIST 360-3 An Introduction to Environmental History  
HHSC 430-3 Toxicology and Environmental Health  
INTS 470-3 International Environmental Policy  
NREM 306-3 Society, Policy and Administration  
or POLS 334-3 Society, Policy and Administration of Natural Resources  
POLS 403-3 Social and Health Policy and Administration

### **S-201301.23**

#### **Changes to Program Requirements — Bachelor of Health Sciences (Community and Population Health Majors)**

Tait

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the changes to the program requirements (addition of ENVS 306-3 Human Ecology to the course requirements) for the Community and Population Health majors of the Bachelor of Health Sciences be approved as proposed.

Effective date: September 2013

CARRIED.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

#### **Page 148, 2012/2013 Calendar 2nd Column**

##### **4th year - 6 credit hours**

HHSC 421-3 Medical Geography  
or ENVS 306-3 Human Ecology  
HHSC 473-3 Health Promotion

#### **Page 149, 2012/2013 Calendar 1st Column**

##### **Major in Community and Population Health – Environmental Health**

Students must take:

ENPL 205-3 Environment and Society  
ENSC 308-3 Northern Contaminated Environments

Students must take an additional 6 credit hours from the following list (please note that some of these courses may require additional prerequisites):

ECON 410-3 Health Economics  
ENPL 208-3 First Nations Community and Environmental Planning  
ENPL 304-3 Mediation, Negotiation and Public Participation  
~~ENVS 306-3 Human Ecology~~  
HIST 360-3 An Introduction to Environmental History

#### **S-201301.24**

#### **Changes to Calendar Description — Northern Collaborative Baccalaureate Nursing Program (Immunization Recommendations)**

Whitcombe

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the changes to the calendar description for the Northern Collaborative Baccalaureate Nursing Program (Immunization recommendations), on page 172 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

### **Immunization and CPR Certification**

All students accepted into the NCBNP are sent documentation and information regarding immunization policies. Once accepted into ~~to~~ the Program, all students must submit:

- ~~record of immunization status. Current status for the following immunizations is strongly recommended: diphtheria, tetanus, poliomyelitis, measles, mumps, rubella, hepatitis B and varicella. A Mantoux test (PPD) for tuberculosis is also strongly recommended. Completed immunization forms must be submitted to the Admissions Office at the institution the student is currently attending prior to Sept 30 in the first year of attendance. Failure to do so may result in the student not being allowed to practice in the clinical setting.~~
- A record of immunization status. The following immunizations are strongly recommended and the current status of each is to be submitted:
  - Diphtheria, tetanus, poliomyelitis, measles, mumps, rubella, hepatitis B and varicella.
  - A Mantoux test (PPD) for tuberculosis
  - Meningococcal C conjugate for those born on or after January 1, 1988
  - Yearly Influenza vaccine. Submission deadline to be announced annually based on release date of vaccine.

Completed immunization forms must be submitted to the Admissions Office at the institution the student is currently attending prior to Sept 30 in the first year of attendance. Failure to do so may result in the student not being allowed to practice in the clinical setting.

- Documentation of CPR certification, level C, which must be successfully maintained throughout the program. Proof of CPR certification (and re-certification, as needed) must be submitted prior to commencement of classes.
- CPR must be recertified every two years regardless of expiry date on the card.

#### **S-201301.25**

#### **Changes to Calendar Description — BSc Honours – Psychology**

Ryan

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change(s) to the calendar description for BSc Honours – Psychology, on page 181 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

A Senator asked whether the CASHS honours programs met the requirements of the CSAM policy on honours degree requirements. The Chair of the Department of Psychology responded that she did not know, as she was unfamiliar with the CSAM honours degree policy requirements. It was suggested that the matter of an institution-wide policy regarding honours degree requirements be discussed at the next meeting of SCAPP. Dr. Dale agreed to add this matter as an agenda item for the next meeting of SCAPP.

CARRIED.

**Action:** Ms. Myers to add this item to the agenda for the next meeting of SCAPP.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

Each student must complete a thesis ~~project~~ (PSYC 490-3 (Honours Thesis I), and PSYC 495-3 (Honours Thesis II)) under the supervision of a faculty member. ~~Admission Entry~~ to the Honours Program takes place after the end of the second year (i.e., upon completion of at least 60 credit hours) and requires a minimum ~~Cumulative~~ GPA of 3.33 calculated on the last 60 credit hours completed at the time of declaration to the Honours Program. Attaining the minimum requirement does not guarantee ~~admission entry~~ to the Honours Program, which will be at the discretion of the Department. To remain in the Honours Program students must maintain a minimum ~~Semester Cumulative~~ GPA of 3.33 to be calculated at the end of each semester as well as receive no grade lower than a C+ in any course after ~~admittance entry~~ to the Honours Program.

#### **S-201301.26**

#### **Renewal of Exchange Agreement — University of Dundee and the University of Northern British Columbia**

Hutchings

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the renewal of Memorandum of Agreement between the University of Dundee and the University of Northern British Columbia be approved as proposed.

Effective date: January 2013

A Senator noted that, in this agreement (on page 167 of 225 of the Senate meeting package), there was a phrase which read “examination of issues related to XXXXXX” and that this should be amended before the agreement goes forward.

CARRIED.

#### **“For Information” Items:**

#### **SCAPP201301.12**

#### **Changes to Calendar Course Description and Prerequisites — BCMB 401-3**

Whitcombe

That the changes to the calendar course description and prerequisites for BCMB 401-3 Oncology, on page 194 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

BCMB 401-3 Basic Science of Oncology This is a lecture-based course designed to provide insight into ~~our basic understanding of~~ the biological chemistry of cancer. Major topics include chemical carcinogenesis, genomic instability, oncogenes and tumor suppressor genes, cell growth, apoptosis, tumor progression and metastasis, tumor angiogenesis, hormones, viruses, and drug resistance. This course also provides an in-depth look at the advanced technology used in controlling the disease, including immunotherapy and therapeutic approaches ~~in for~~ controlling gene expression.  
~~Prerequisites: BCMB 330-3 or CHEM 330-3~~ BIOL 311-3 with a minimum grade of C ~~in all prerequisite courses~~  
~~Precluded: CHEM 405-3~~

#### **SCAPP201301.13**

#### **Changes to Course Prerequisites — BCMB 402-3**

Whitcombe

That the change(s) to the course prerequisite for BCMB 402-3 Macromolecular Structure, on page 195 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

#### BCMB 402-3 Macromolecular Structure

This is a lecture-based course designed to provide students with an understanding of the theory behind structural techniques used in biochemical laboratories. Topics include X-ray crystallography, nuclear magnetic resonance spectroscopy and electron microscopy. Students are expected to develop an understanding of the theory and application of these techniques and technical considerations. Students also learn how to judge the quality of data.

#### Prerequisites:

~~(CHEM 307 Minimum Grade of C or BCMB 307 Minimum Grade of C) and (CHEM 330 Minimum Grade of C or BCMB 330 Minimum Grade of C)~~

CHEM 204-3 with a minimum grade of C

#### **SCAPP201301.14**

#### **Changes to Calendar Course Description and Prerequisites — BCMB 403-3**

Whitcombe

That the changes to the calendar course description and prerequisites for BCMB 403-3 Advanced Nucleic Acids, on page 195 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

BCMB 403-3 Advanced Nucleic Acids This is a lecture-based course designed to provide in-depth knowledge on advanced topics in nucleic acid biochemistry. Topics include mechanistic analysis of nucleic acid metabolism; the RNA world hypothesis and theories of the origin of life; epigenetics; specificity and role of polymerases and repair pathways; replication and recombination mechanisms; RNA structural motifs and physical processing in gene expression; structure and function of non-coding RNA; silencing and micro RNA; catalytic RNA molecules; and technological applications of RNA molecules.

~~Prerequisites: BCMB 330-3 or CHEM 330-3~~ CHEM 204-3 with a minimum grade of C  
in all prerequisite courses

~~Precluded: CHEM 405-3~~

#### **SCAPP201301.16**

#### **Changes to Course Title and Calendar Course Description — ENSC 302-3**

Whitcombe

That the change(s) to the course title and calendar course description for ENSC 302-3 Energy Development, on page 228 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

#### ENSC 302-3 Low Carbon Energy Development

~~This course provides aAn overview of different types low-carbon energy sources uses and the environmental consequences of development. The course will covers global resources, with a focus on energy development in Western Canada British Columbia with respect to oil, gas, hydro, and coal. Alternative energy futures will also be examined. Topics include environmental, economic and social aspects of nuclear, bioenergy, solar, geothermal, wind, hydro, and ocean energy.~~

Prerequisites: 30 credit hours  
Precluded: ENPL 302-3

### **SCAPP201301.17**

#### **Changes to Calendar Course Description and Prerequisites — ENSC 418-3**

Whitcombe

That the change(s) to the course description and prerequisites for ENSC 418-3 Environmental Measurement and Analysis, on page 229 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

#### **ENSC 418-3 Environmental Measurement and Analysis**

This is a capstone course for Environmental Science and Environmental Engineering Majors. It is a quantitative laboratory and field-based course focusing on advanced environmental measurement and analysis of atmospheric, aquatic, and terrestrial systems. The approach is integrative and problem-oriented; students may examine natural and/or managed systems, including engineered systems (e.g., waste management) and systems impacted by anthropogenic activity (e.g., contamination-).

*Prerequisites:* STAT 240-3 or STAT 371-3, ~~ENSC 308-3 or ENSC 200-3~~, 200 level 3 credit Chemistry, FSTY 205-3 or GEOG 210-3, and 90 credit hours or permission of the instructor

*Strongly recommended:* BIOL 203-3, ENSC 201-3, ENSC 202-3, ENSC 308-3

*Precluded:* ENV 418-3

### **SCAPP201301.18**

#### **Changes to Calendar Course Description and Prerequisites — ENSC 452-3**

Whitcombe

That the change(s) to the calendar course description and prerequisites for ENSC 452-3 Reclamation and Remediation of Disturbed Environments, on page 229 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: Immediately upon approval by Senate

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

#### **ENSC 452-3 Reclamation and Remediation of Disturbed Environments**

This course takes an integrative, scientific approach to the remediation and reclamation of drastically disturbed environments. Industrial activity and chemical spills can result in the contamination of soil, surface water, and groundwater. In addition, some industrial activities such as mining can cause large scale disturbances to the landscape, potentially impacting both terrestrial and aquatic systems. The focus is on the remediation and reclamation of terrestrial systems, but aquatic systems ~~will be~~ are also included.

*Prerequisites:* ~~a~~Any second-year 200-level 3-credit hour Chemistry course, FSTY 205-3, and 60 credit hours

*Recommended:* ENSC 308-3 ~~and FSTY 455-3~~

### **SCAPP201301.26**

#### **Changes to Course Title — ORTM 100-3**

Whitcombe

That the change(s) to the course title for ORTM 100-3 Leisure in Life, on page 265 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

ORTM 100-3 Leisure in Life Foundations of Outdoor Recreation and Tourism

This course introduces the foundations of outdoor recreation and tourism from the perspective of both the natural and social sciences. Content includes the history and philosophy of the concept of leisure, the role of leisure, recreation and tourism in students' lives and Western culture, outdoor recreation and tourism in integrated resource management, and current delivery systems.

Precluded: RRT 201-3 or RRT 203-3

**SCAPP201301.27**

**Changes to Course Title and Calendar Course Description — ORTM 332-3**

Whitcombe

That the changes to the course title and calendar course description for ORTM 332-3 Outdoor Education and Leadership, on page 266 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

ORTM 332-3 Outdoor, ~~Education and Leadership~~ Environmental, and Experiential Education

~~This course explores theory and practice of pedagogy and leadership used in providing travel and recreation experiences in outdoor settings~~ the historical, theoretical, and practical foundations of outdoor, environmental, and experiential education. It focuses on conventional and innovative applications and models of these techniques and philosophies for personal, social, and environmental learning. It bridges theory and practice in safe field-based learning environments. The physical setting as well as the semester in which the course is offered may alter course content from year to year. The course may be repeated when a substantial difference in curriculum exists.

Prerequisites: Upper-division standing

**SCAPP201301.28**

**Changes to Prerequisites — ORTM 407-3**

Whitcombe

That the change(s) to the prerequisites for ORTM 407-3 Recreation, Tourism and Communities, on page 266 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

ORTM 407-3 Recreation, Tourism and Communities

This course assesses the relationship between tourism and recreation and local communities as well as collaborative techniques for involving communities in tourism consultation processes. It covers topics such as the concepts of communities and stakeholders, hosts and guests, the relationship between community involvement and tourism, community attitudes towards tourism development and emerging approaches ~~towards~~ collaboration and partnerships.

Prerequisites: ~~ORTM 204-3 and a~~ Any 300-level ORTM course or any 200-level ENPL course

Precluded: ORTM 498-3 (2005-2007) Recreation, Tourism and Communities

**SCAPP201301.29**

**Changes to Course Number (Year Level) and Prerequisites — ORTM 410-3**

Whitcombe

That the change(s) to the course number (year level) and prerequisites for ORTM 410-3 Research Methods and Analysis, on page 266 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

ORTM 440310-3 Research Methods and Analysis

This course examines contemporary research approaches and methods using a variety of examples from the natural and social sciences focusing on outdoor recreation and tourism ~~examples~~. Topics include the research process and quantitative and qualitative approaches to research. The class incorporates an applied project or projects for which data will be collected and analyzed in a mix of lab and lecture formats.

Prerequisites: ~~ORTM 300-3~~ and ECON 205-3 or STAT 240-3 or permission of the instructor  
Precluded: ORTM 410-3

**SCAPP201301.33**

**Changes to Calendar Course Description / Prerequisites — NURS 329-1**

Whitcombe

That the changes to the calendar course description / prerequisites for NURS 329-1 Third Year Objective Structured Clinical Examination be approved as proposed.

Effective date: May 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

**NURS 329-1 Third Year Objective Structured Clinical Examination** This course requires students to successfully complete a number of Objective Structured Clinical Examination (OSCE) scenarios as a prerequisite to commencing NURS 330-4 Extended Clinical Practicum II. An OSCE is a method of evaluation used to measure whether specific practice performance expectations are met, and to evaluate students' clinical judgment and integration of theory and practice in standardized situations of simulated patient care. Thirty-six hours of structured nursing laboratory practice must be successfully completed no more than ~~within~~ eight months before the student of undertaking undertakes the OSCE. Lab hours must be approved by a lab an instructor.

*Prerequisites:* ~~a~~All required 300-level ~~n~~Nursing courses in the NCBNP

**SCAPP201301.34**

**Changes to Calendar Course Description / Prerequisites — NURS 330-4**

Whitcombe

That the changes to the calendar course description / prerequisites for NURS 330-4 Extended Clinical Practicum II, on page 261 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: May 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strike through~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

**NURS 330-4 Extended Clinical Practicum II** This course provides the opportunity for consolidated clinical nursing practice with clients who have multiple health care needs. Previous clinical practice experience is considered when determining placement. The practicum occurs in various health care settings in northern BC. Thirty-six hours of structured nursing laboratory practice and NURS 329-1 must be successfully completed no more than eight months before the student undertakes NURS 330-4. Lab hours must be approved by a lab instructor.

*Prerequisites:* NURS 329-1

*Precluded:* NURS 320-5

9.1.1 **S-201301.05**  
**Approval of Motions on the Consent Agenda**

Whitcombe

That the motions on the consent agenda, except for those removed for placement on the regular agenda, be approved as presented.

CARRIED.

9.2 **Senate Committee on Research and Graduate Studies**

**Bird / Dale**

**“For Approval” Items:**

**S-201301.27**

**New Course Approval — HHSC 760-3**

Whitcombe

That, on the recommendation of the Senate Committee on Research and Graduate Studies, the new course HHSC 760-3 Field School in Human Ecology be approved as proposed.

Proposed semester of first offering: May 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

This field-school is an intensive, interdisciplinary course addressing themes including social-ecological systems, human-environment relationships and ecosystem approaches to health. The course includes class-based sessions and intensive field-based components relevant to the course theme and location, which differ from year to year. The field-school brings together colleagues in natural sciences, health sciences, social sciences, humanities, and beyond, who work in collaboration with interested parties and community members to address issues at the interface of environment, society and health.

**Prerequisites:** Graduate standing

**Preclusions:** NRES 760-3

**S-201301.28**

**New Course Approval — NRES 760-3**

Whitcombe

That, on the recommendation of the Senate Committee on Research and Graduate Studies, the new course NRES 760-3 Field School in Human Ecology be approved as proposed.

Proposed semester of first offering: May 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~striketrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

This field-school is an intensive, interdisciplinary course addressing themes including social-ecological systems, human-environment relationships and ecosystem approaches to health. The course includes class-based sessions and intensive field-based components relevant to the course theme and location, which differ from year to year. The field-school brings together colleagues in natural sciences, health sciences, social sciences, humanities, and beyond, who work in collaboration with interested parties and community members to address issues at the interface of environment, society and health.

**Prerequisites:** Graduate standing

**Preclusions:** HHSC 760-3

**S-201301.29**

**Changes to Requirements — MBA Degree (Required Courses for the First Year and Second Year)**

Zahir

That, on the recommendation of the Senate Committee on Research and Graduate Studies, the changes to the MBA degree requirements (Required Courses for the First Year and Second Year), on page 61 in the 2012/2013 graduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED.

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strikethrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

**Required Courses for the First Year**

COMM 603-3 Business and Corporate Strategy  
COMM 610-3 Accounting  
COMM 620-3 Corporate Finance  
COMM 632-3 Organizational Behaviour  
COMM 640-3 Marketing  
COMM 650-3 Operations Management  
COMM 690-3 ~~Northern Business Issues~~ Canada's Asia Pacific Gateway  
ECON 608-3 Managerial Economics  
COMM 651-3 Quantitative Decision Analysis

**Required Courses for the Second Year**

**CHOOSE Option A or B**

**Option A**

**COMM 799-6 MBA Project**

Five of:

COMM 701-3 Strategy Implementation  
COMM 703-3 International Business  
COMM 725-3 Financial Management  
COMM 735-3 Law, Governance and Ethics  
COMM 736-3 Human Resource Management and Industrial Relations  
COMM 755-3 Management of Technology  
COMM 751-3 Project Management

**Option B**

COMM 701-3 Strategy Implementation  
COMM 703-3 International Business  
COMM 725-3 Financial Management  
COMM 735-3 Law, Governance and Ethics  
COMM 736-3 Human Resource Management and Industrial Relations  
COMM 755-3 Management of Technology  
COMM 751-3 Project Management

**Required Project**

~~COMM 799-6 MBA Project~~

**S-201301.30**

**Changes to the Name of the Tourism Stream of the Natural Resources and Environmental Studies MA Program**

Whitcombe

That, on the recommendation of the Senate Committee on Research and Graduate Studies, the change(s) to the name of the Tourism stream of the Natural Resources and Environmental Studies (MA Program), on page 83 of the 2012/2013 graduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strikethrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

## Natural Resources and Environmental Studies (MA Program)

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Chair of the Natural Resources and Environmental Studies Graduate Committee: Dr. Annie Booth

**Geography**

Gail Fondahl, Professor (Geography)

Kevin Hall, Professor (Geography)

Greg Halseth, Professor, and Canada Research Chair, Rural and Small Town Studies (Geography)

Neil Hanlon, Associate Professor (Geography)

Catherine Nolin, Associate Professor (Geography)

Jueyi Sui, Associate Professor (Environmental Engineering)

Roger Wheate, Associate Professor (Geography)

Zoe Meletis, Assistant Professor (Geography)

#### **Environmental Studies**

Kevin Hall, Professor (Geography)

Andrew D. Seidel, Professor (Environmental Planning)

Annie Booth, Associate Professor (Ecosystem Science and Management)

David Connell, Associate Professor (Environmental Planning)

John Curry, Associate Professor (Environmental Planning)

Balbinder Deo, Associate Professor (Business Management)

Gail Fondahl, Associate Professor (Geography)

Michael Murphy, Associate Professor (Political Science) and Canada Research Chair, Comparative Indigenous-State Relations

Jueyi Sui, Associate Professor (Environmental Engineering)

Tracey Summerville, Associate Professor (Political Science)

Ken Wilkening, Associate Professor (International Studies)

Loraine Lavalee, Assistant Professor (Psychology)

Orland Wilkerson, Assistant Professor (Environmental Planning)

#### **Tourism Outdoor Recreation, Conservation and Tourism**

Patrick Maher, Associate Professor (Outdoor Recreation and Tourism Management)

John Shultis, Associate Professor (Outdoor Recreation and Tourism Management)

Pamela Wright, Associate Professor (Outdoor Recreation and Tourism Management)

**Website:** <http://www.unbc.ca/nres>

The Master of Arts in Natural Resources and Environmental Studies [MA(NRES)] offers students the opportunity to pursue studies of the social dimensions of human-environment interactions from a community-based or regional perspective. The degree is distinguished by its focus on human perspectives on historical and contemporary resource and environmental issues. It encourages the study of the social, cultural, ethical, economic and political dynamics of resource and land use, and environmental change in northern ecosystems.

Students must choose from the following areas of study:

Environmental Studies

Geography

~~Tourism~~–Outdoor Recreation, Conservation and Tourism

#### **S-201301.31**

#### **Changes to the Name of the Outdoor Recreation and Tourism Management Stream of the Natural Resources and Environmental Studies MSc Program**

Whitcombe

That, on the recommendation of the Senate Committee on Research and Graduate Studies, the change(s) to the name of the Outdoor Recreation and Tourism Management stream of the Natural Resources and Environmental Studies (MSc Program), on page 86 of the 2012/2013 graduate calendar, be approved as proposed.

Effective date: September 2013

CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by ~~strikethrough~~, new text indicated by underline, and [commentary, where included, in Courier New font within square brackets]):

## Natural Resources & Environmental Studies (MSc Program)

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Chair of the Natural Resources and Environmental Studies Graduate Committee: Dr. Annie Booth

### **Biology**

Darwyn Coxson, Professor (Ecosystem Science and Management)  
Russell Dawson, Professor, and Canada Research Chair, Avian Ecology (Ecosystem Science and Management)  
Keith Egger, Professor (Ecosystem Science and Management)  
Arthur Fredeen, Professor (Ecosystem Science and Management)  
Michael Gillingham, Professor (Ecosystem Science and Management)  
Kathy Lewis, Professor (Ecosystem Science and Management)  
Staffan Lindgren, Professor (Ecosystem Science and Management)  
Hugues Massicotte, Professor (Ecosystem Science and Management)  
William McGill, Professor (Ecosystem Science and Management)  
Katherine Parker, Professor, and Ian McTaggart Cowan Muskwa Kechika Research Professor (Ecosystem and Science Management)  
Ellen Petticrew, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Geography)  
Mark Shrimpton, Professor (Ecosystem Science and Management)  
Philip Burton, Associate Professor (Ecosystem Science and Management)  
Scott Green, Associate Professor (Ecosystem Science and Management)  
Dezene Huber, Associate Professor Forest Entomology and Chemical Ecology (Ecosystem Science and Management)  
Christopher Johnson, Associate Professor (Ecosystem Science and Management)  
Brent Murray, Associate Professor (Ecosystem Science and Management)  
Ken A. Otter, Professor (Ecosystem Science and Management)  
Lisa Poirer, Assistant Professor (Ecosystem Science and Management)  
Jane Young, Assistant Professor (Ecosystem Science and Management)

### **Environmental Science**

Joselito M. Arocena, Professor (Environmental Science and Engineering)  
Darwyn Coxson, Professor (Ecosystem Science and Management)  
Keith Egger, Professor (Ecosystem Science and Management)  
Arthur Fredeen, Professor (Ecosystem Science and Management)  
Kevin Hall, Professor (Geography)  
Peter Jackson, Professor (Environmental Science and Engineering)  
William McGill, Professor (Ecosystem Science and Management)  
Ellen Petticrew, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Geography)  
Ron Thring, Professor (Chemistry, Environmental Science and Engineering)  
Annie Booth, Associate Professor (Ecosystem Science and Management)  
John Curry, Associate Professor (Environmental Planning)  
Jianbing Li, Associate Professor (Environmental Engineering)  
Brian Menounos, Associate Professor (Geography)  
Philip Owens, Associate Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Environmental Science)  
Michael Rutherford, Associate Professor (Environmental Science and Engineering)  
Paul Sanborn, Associate Professor (Ecosystem Science and Management)  
Jueyi Sui, Associate Professor (Environmental Engineering)

Youmin Tang, Professor, and Canada Research Chair, Climate Prediction and Predictability (Environmental Science and Engineering)

Todd Whitcombe, Associate Professor (Chemistry)

Stephen Déry, Associate Professor, and Canada Research Chair, Northern Hydrometeorology (Environmental Science and Engineering)

Steve Helle, Associate Professor (Environmental Engineering)

### **Forestry**

Joselito M. Arocena, Professor (Environmental Science and Engineering)

Oscar Garcia, Professor, and Forest Renewal BC Endowed Chair in Forest Growth and Yield (Ecosystem and Science Management)

Keith Egger, Professor (Ecosystem and Science Management)

Arthur Fredeen, Professor (Ecosystem Science and Management)

Kevin Hall, Professor (Geography)

Kathy Lewis, Professor (Ecosystem Science and Management)

Staffan Lindgren, Professor (Ecosystem Science and Management)

Hugues Massicotte, Professor (Ecosystem Science and Management)

William McGill, Professor (Ecosystem Science and Management)

Ron Thring, Professor (Chemistry, Environmental Science and Engineering)

Scott Green, Associate Professor (Ecosystem Science and Management)

Philip Burton, Associate Professor (Ecosystem Science and Management)

Ian Hartley, Associate Professor (Ecosystem Science and Management)

Chris Hawkins, Associate Professor, and Forest Renewal BC Endowed Chair in Mixed Wood Ecology and Management (Ecosystem Science and Management)

Christopher Johnson, Associate Professor (Ecosystem Science and Management)

Chris Opio, Associate Professor (Ecosystem Science and Management)

Paul Sanborn, Associate Professor (Ecosystem Science and Management)

Dezene Huber, Associate Professor, and Canada Research Chair, Forest Entomology and Chemical Ecology (Ecosystem Science and Management)

Lisa Poirier Assistant Professor (Ecosystem Science and Management)

### **Geography**

Joselito M. Arocena, Professor (Environmental Science and Engineering)

Kevin Hall, Professor (Geography)

Peter Jackson, Professor (Environmental Science and Engineering)

Ellen Petticrew, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Geography)

Brian Menounos, Associate Professor (Geography)

Philip Owens, Associate Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Environmental Science)

Jueyi Sui, Associate Professor (Environmental Engineering)

Youmin Tang, Professor, and Canada Research Chair, Climate Prediction and Predictability (Environmental Science and Engineering)

Roger Wheate, Associate Professor (Geography)

### **~~Outdoor Recreation and Tourism Management~~ Outdoor Recreation, Conservation and Tourism**

John Shultis, Associate Professor (Outdoor Recreation and Tourism Management)

Pamela Wright, Associate Professor (Outdoor Recreation and Tourism Management)

Patrick Maher, Associate Professor (Outdoor Recreation and Tourism Management)

**Website:** <http://www.unbc.ca/nres>

**“For Information” Items:****SCSB20121128.03****New Terms and Conditions — PG Retired Teachers’ Association Bursary**

Whitcombe

That the new Terms and Conditions for PG Retired Teachers’ Association Bursary be approved.

Effective date: 2013-2014 Academic Year

CARRIED (consent agenda).

**SCSB20121128.04****New Terms and Conditions — Northern Exposure Award**

Whitcombe

That the new Terms and Conditions for the Northern Exposure Award be approved.

Effective date: 2013-2014 Academic Year

CARRIED (consent agenda).

## 9.4 Steering Committee of Senate

Iwama

**S-201301.32****Change to Senate Handbook — Membership for Senate Committee on First Nations and Aboriginal Peoples**

Whitcombe

That the Senate Committee on First Nations and Aboriginal Peoples membership be expanded to include a School District 57 Aboriginal Education Board Committee member; and that this be done by amending the membership section of the committee’s Terms of Reference to include such a member under the heading “Seven [now Eight] Representatives”.

Effective date: January 2013

CARRIED.

## 9.5 Senate Committee on Nominations

Zahir

## 9.5.1 Senate Committee Vacancies

The list of vacancies was provided to Senate for information.

**“For Approval” Items:****S-201301.33****Membership Changes to Senate Committees (no material)**

Whitcombe

That, on the recommendation of the Senate Committee on Nominations, and barring further nominations from the floor of Senate, the following candidates, who have met all eligibility requirements to serve on Senate committees as indicated, be appointed as proposed.

Effective date: Immediately upon approval by Senate

**SENATE OR SENATE COMMITTEE POSITION TO BE FILLED**  
**(except as otherwise noted, all terms begin immediately)****CANDIDATE**Senate Committee on Academic Policy and Planning

Undergraduate Student (until March 31, 2013)

Robin Currie-Wood

The Chair of the Senate Committee on Nominations called for further nominations, and there being none, the motion was CARRIED and the candidate was appointed as proposed.

## 10.0 Other Business

No other business was identified.

**11.0 Information**

There were no items for information.

**12.0 S-201301.34  
Move to In Camera Session**

Dale  
That the meeting move In Camera.  
CARRIED.

**13.0 S-201301.38  
Adjournment**

Whitcombe  
That the Senate meeting be adjourned.  
CARRIED.

The meeting ended at 5:40 p.m.

# APPENDIX I

## **President's Report Senate meeting of January 23, 2013 Prepared by Charlene Myers**

Dr. Iwama reported that Justin Trudeau was on campus today, and he had met with students and was provided with a tour. Tomorrow, James Moore will be at UNBC.

Today's issue of the "University Affairs" publication contained a story about UNBC's block teaching pilot program. Dr. Iwama invited Senator Nolin to speak about the pilot program, and Senator Nolin responded that the experience was very positive. The first course finished today and the second course starts on Monday. Dr. Iwama added that the comments from the students were very similar to the remarks he heard from students when he did some block teaching. The students learned and retained a lot and appreciated the camaraderie. He congratulated the Department of Geography and thanked them for hosting this block teaching pilot program.

Dr. Iwama reported that UNBC had just unveiled a new website, and thanked the people in Information Technology Services and Communications who spent countless hours working to facilitate this project, as well as those who provided input. He added that there are ongoing workshops to assist web content editors.

The Vice Presidents and Dr. Iwama met in Shelley with the Chief and Councilors of the Lheidli T'enneh First Nation to discuss programs and moving forward. They had a good discussion over the last few weeks, and have been talking about support and tutoring for children from elementary through to high school. This opportunity is enabled by a foundation that has, as its priority, to support education of First Nations people. The students participate three afternoons and evenings during the week. Dr. Iwama expressed thanks to those who helped get this initiative started. UNBC and Lheidli T'enneh administrators spoke about that project and how they might develop it.

A National Elders' meeting is being hosted by the Lheidli T'enneh First Nation this summer. They are looking for a venue and other support for the event, and are currently discussing these details with Mr. Aaron LeBlanc, UNBC's Manager of Ancillary Services. Dr. Iwama added that it takes work to build this partnership, and thanked Senator Robinson for her contributions, particularly in relation to discussions with Lake Babine and Treaty 8 partners who are working with UNBC researchers.

Dr. Iwama noted that one of the priorities expressed to the Lheidli T'enneh Chief and Council is where we find ourselves in the north, BC and Canada. UNBC has some unique characteristics, and at a conference call to be held today with the Presidents of the other research intensive universities they will be discussing the priorities of an "opportunities agenda," which the universities have suggested contains 3 elements: affordability, accessibility, and sustained support of research. The Presidents of the research-intensive universities see their institutions as being in partnership with colleges, and note that although training is important, universities also play a crucial role. He added that the theory is that the "tipping point," where the number of jobs outweighs the number of students, will happen in 2016, but that has already been the case in the north for 6 to 8 years. He suggested that the universities need to make their emphasis very clear. The business of extracting natural resources is taking place in UNBC's neighbourhood and the university is privileged to have an opportunity to take advantage of this situation.

UNBC is holding its own on enrolment but the enrolment numbers are not as positive as the numbers at the southern BC universities.

Finally, Dr. Iwama concluded his report by noting that there was no news with regard to the Wood Innovation and Design Centre or Engineering programs for UNBC.

# ADDED & DELETED UNDERGRADUATE COURSES

## APPENDIX III

2008		2009		2010		2011		2012	
Added	Deleted								
56	24	53*	17	41**	18	15	17	39	37

\* 53 New courses includes 10 Continuing Studies for Credit Courses

\*\* 41 New courses includes 5 NOLS courses & 16 Continuing Studies for Credit Courses

**5-Year Total # of UGRAD New Courses Added: 204**

**5-Year Total # of UGRAD Deleted Courses: 113**

**5-Year Total # of Graduate Courses Added: 99**

**5-Year Total of Graduate Courses Deleted: 32**

# 5-YEAR SUMMARY OF UNDERGRADUATE COURSES OFFERED

2008-09		2009-10		2010-11		2011-12		2012-13*	
Classes Offered	Classes Filled								
1,803	1,456	1,821	1,457	1,729	1,456	1,664	1,441	1,628	1,491

**Classes Offered:** The total number of undergraduate courses available for registration

**Classes Filled:** The number of classes in which at least one student was enrolled

\*Statistics may be adjusted to reflect official enrolment date for January 2013 semester