

**SENATE MEETING  
PUBLIC SESSION  
MINUTES**

December 11, 2013  
3:30 – 5:30 PM

Senate Chambers (Room 1079 Administration Building)

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**Present:**

E. Annis, R. Bird, R. Brouwer, J. Brown, D. Casperson, M. Dale, A. Daniele, B. Deo, L. Dickson, M. Green, K. Guest, T. Hanschen (Secretary of Senate), G. Iwama (Chair), D. Leighton-Stephens, B. Murray, C. Myers (Recording), M. Nitz, C. Nolin (Vice Chair), D. Nyce, K. Reimer, D. Ryan, J. Safaei Boroojeny, P. Sanborn, B. Schorcht, P. Siakaluk, R. Tallman, S. Wagner, B. Wang, T. Whitcombe, A. Wilson, S. Zahir

**Regrets:**

M. Archie, C. Carriere, S. Green, L. Handfield, E. Korkmaz, J. Kormos, A. LeBlanc, R. Robinson, K. Smith, A. Stroet, K. Walker

**Absent:**

D. Burke, D. de Vries, K. Kuo, I. Legault

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The meeting commenced at 3:30 p.m. Dr. Iwama thanked Senator Casperson who was attending his last meeting of Senate.

**1.0**      **S-201312.01**  
**Approval of the Agenda**

Deo

That the agenda for the December 11, 2013 Public Session of Senate be approved as presented.

A Senator asked that an item be added to the agenda (11.1 Report from the Senate Committee on the University Budget). There was no opposition to this request, so the motion to approve the agenda, as amended, was CARRIED.

**2.0**      **S-201312.02**  
**Approval of Senate Minutes**

Zahir

That the minutes of the November 27, 2013 Public Session of Senate be approved as presented.  
CARRIED.

**3.0**      **Business Arising from Previous Minutes of Senate**

With regard to a question arising from a previous meeting of Senate about the Administrative Service Delivery Transformation Project, Dr. Iwama indicated that meetings of this group are ongoing and that several committees have been created to further the work that has been done.

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

Dr. Iwama had nothing to report, but thanked Senators and the Steering Committee of Senate for their support during his time at UNBC.

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

Dr. Dale reported that the Board of Governors had approved the job description and selection procedures for the Dean of Regional Programs. They also approved, in principle, the Master of Engineering in Integrated Wood Design.

**6.0 Report of the Registrar** **Hanschen**

Mr. Hanschen asked for Senate's indulgence to allow Dr. Owen to report on some recent information received regarding the National Survey of Student Engagement (NSSE). Dr. Owen reported that he had just received the information a few days ago so had not had time to review it in detail. However, he noted that, based on comments from first and fourth year students, UNBC provides a supportive environment for students. The snapshot indicates that UNBC is a university that values and provides experiential learning opportunities for students. Dr. Owen stated that he would provide a fuller report in the near future.

**7.0 Question Period**

A Senator asked whether Senators could see the NSSE data, and Dr. Owen replied that he would share it in the near future.

A Senator questioned what attributed to the increase in student applications, and the Registrar replied that perhaps it was because the recruiters increased their presence in the high schools.

**8.0 Removal of Motions from the Consent Agenda**

No motions were removed from the consent agenda.

**9.0 Committee Reports**

**9.1 Senate Committee on Academic Affairs** **Dale**

**"For Approval" Items:**

A summary of the proposed changes to the Health Sciences curriculum was included for information.

**S-201312.03**

**Changes to Degree Requirements and Calendar Description — Bachelor of Health Sciences (Removal of HHSC 110-3 and HHSC 330-3)**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the calendar changes to the degree requirements for Bachelor of Health Sciences be approved as proposed: removal of HHSC 110-3 Microbiology from the BHSc degree requirements (not from the Calendar), and of HHSC 330-3 Health Information Management Technology from the BHSc degree requirements.

Effective date: January 2014

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]):

## Health Sciences (BHSc Program)

- Biomedical Studies
- Community and Population Health - Aboriginal and Rural Health
- Community and Population Health - Environmental Health

Henry Harder, Professor and Chair

Martha MacLeod, Professor

Ken Prkachin, Professor

Josée Lavoie, Associate Professor

Peter MacMillan, Associate Professor

Shannon Wagner, Associate Professor

Sarah de Leeuw, Assistant Associate Professor

Luke Harris, Assistant Professor

Margot Parkes, Assistant Associate Professor and Canada Research Chair

Mamdouh Shubair, Assistant Professor

Anne George, Adjunct Professor

Michael Leisinger, Adjunct Professor

Barbara Low, Adjunct Professor

Arlene Ward, Adjunct Professor

Anne Sommerfeld, Senior Lab Instructor

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

The Bachelor of Health Sciences degree is a four-year program consisting of a range of courses that relate directly to the science of health, in the recognition that health is a complex entity defying a simple explanation or a single disciplinary perspective. The courses identified within the School of Health Sciences offer learning opportunities from a variety of disciplines, including the Life Sciences, Social Sciences, Behavioural Sciences, and Ethics and Law, to enable students to develop a body of knowledge and understanding relating to the dimensions of Health. Some of these courses are considered to be 'core' and therefore central to the basic understandings of health, while others offer the student opportunities to learn about a specific health perspective that is focused on one of three Majors:

- i. Biomedical Studies,
- ii. Community and Population Health-Environmental Health, or,
- iii. Community and Population Health-Aboriginal and Rural Health.

Graduation from either of the Community and Population Health Majors enables students to embark on careers or graduate programs related to health care management, administration, information systems or public health.

Students pursuing the Biomedical Studies Major are required to complete a set of courses that enables them to be prepared for application to professional programs, such as medicine, nursing, pharmacy, occupational therapy, dentistry, speech pathology or physiotherapy. This major provides a foundational, multidisciplinary knowledge base that is focused on the natural and physical sciences, and social sciences, and includes population health and research methodology. For students interested in other fields requiring extensive biomedical laboratory skills, UNBC also offers a degree in Biochemistry and Molecular Biology (BCMB).

All students graduating with the Bachelor of Health Sciences degree will have developed critical analytical skills, life-long learning skills, and the ability to work from the evidence of best practice.

## General Requirements

To be awarded the BSc degree, students are required to complete 122 credit hours of University-level courses. This consists of ~~56~~ 67 credit hours of common requirements for all BSc students, with the remainder coming from the following majors, and electives:

**Biomedical Studies:** Students take ~~45~~ 34 credit hours of courses from the Biomedical Studies ~~Major~~ and 21 elective credit hours.

**Community and Population Health-Aboriginal and Rural Health:** Students take ~~33~~ 27 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, thus adding to a focus of knowledge and understanding of this specific subject material. The remaining ~~24~~ 16 credit hours are obtained from elective credit hours.

**Community and Population Health - Environmental Health:** Students take ~~33~~ 27 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 ~~24~~ 16 credit hours are obtained from elective credit hours.

Students enrolling in Health Sciences courses with prerequisites are required to have completed all prerequisite courses for those courses with a C- or better, or have permission to enroll from the School Chair.

To change BSc majors, students must apply through Student Advising.

## Admission Requirement

Admission to the Bachelor of Health Sciences program is based on academic qualifications and available space. At the time of application, students must specify whether they intend to pursue either the Biomedical Studies Major or one of the two Community and Population Health Majors. Priority admission is given to students who meet admission criteria and apply by the deadline of March 1. Applications received after the deadline may be reviewed based on available space in the program. Self-identified Aboriginal applicants who meet or exceed the minimum requirements for admission to the program are given priority for up to twenty percent (20%) of the first-year seats for the Bachelor of Health Sciences program.

Applicants from BC and Yukon secondary schools must:

- Meet the basic UNBC admission requirements, and
- Have completed Principles of Mathematics 11 or Pre-Calculus 11, Chemistry 11, Biology 12, English 12 and other approved Grade 12 courses as specified in the Admissions sections of the Undergraduate Calendar with a minimum of C+ (65%) in each course.

Other Applicants must:

- Meet UNBC admission requirements, and
- Have completed the equivalent of Principles of Mathematics 11 or Pre-Calculus 11, Chemistry 11, Biology 12, English 12, and other approved Grade 12 courses as specified in the Admissions section of the Undergraduate Calendar with a minimum of C+ (65%) in each course.

Students interested in specializing in the Biomedical Studies Major are strongly encouraged to take: Pre-Calculus 12, or Principles of

Mathematics 12, and Chemistry 12 before entering the Program.

### **Common Requirements: All Majors**

In order to meet the graduation requirements for a BSc all students must successfully complete the following common requirements consisting of ~~56~~ 67 credit hours. It is recommended that students take the courses listed below in the year of study indicated:

#### **1st year - ~~45~~ 23 credit hours**

~~BIOL 101-4 Introduction Biology I~~

~~BIOL 102-4 Introduction Biology II~~

FNST 100-3 The Aboriginal Peoples of Canada

HHSC 101-3 Introduction to Health Science I: Issues and Controversies

HHSC 103-3 Health Care Systems

PSYC 101-3 Psychology as a Science

PSYC 102-3 Psychology and Human Problems

#### **2nd year ~~47~~ 20 credit hours**

~~BIOL 203-3 Microbiology~~

HHSC 111-4 Anatomy and Physiology I

HHSC 112-4 Anatomy and Physiology II

HHSC 201-3 Ethics and Law in Health Care

HHSC 311-3 Nutrition

STAT 240-3 Basic Statistics

or ECON 205-3 Statistics for the Social and Management Sciences

#### **3rd year - 15 credit hours**

FNST 302-3 First Nations Health and Healing

HHSC 350-3 Introduction to Epidemiology

HHSC 351-3 Research Design and Methods for Health Sciences

PSYC 309-3 Introduction to Health Psychology

PSYC 345-3 Lifespan Development

or SOCW 421-3 Human Growth and Development

#### **4th year - 9 credit hours**

HHSC 451-3 Health Sciences Research Project

HHSC 471-3 Aboriginal Health and Chronic Disease

PSYC 409-3 Advanced Health Psychology

### **Major in Biomedical Studies**

Students pursuing a major in Biomedical Studies are required to complete the following ~~45~~ 34 credit hours of courses. It is recommended that students take the courses listed below in the year of study indicated:

#### **1st year - ~~22~~ 14 credit hours**

~~BIOL 101-4 Introductory Biology I~~

~~BIOL 102-4 Introductory Biology II~~

CHEM 100-3 General Chemistry I

CHEM 120-1 General Chemistry Lab I

CHEM 101-3 General Chemistry II

CHEM 121-1 General Chemistry Lab II

Two of:

ENGL 100-3 Introduction to Literary Structures

ENGL 102-3 Introduction to Poetry

ENGL 103-3 Introduction to Fiction

ENGL 104-3 Introduction to Film

#### **2nd year - ~~47~~ 14 credit hours**

~~BIOL 203-3 Microbiology~~

BIOL 210-3 Genetics

CHEM 201-3 Organic Chemistry I

CHEM 250-1 Organic Chemistry Lab I

CHEM 203-3 Organic Chemistry II  
CHEM 251-1 Organic Chemistry Lab II  
CHEM 204-3 Introductory Biochemistry

**3rd and 4th years - 6 credit hours**

BIOL 311-3 Cell and Molecular Biology  
BCMB 306-3 Intermediary Metabolism

Note: Students intending to apply to professional health degree programs are encouraged to take ~~as electives~~ the following courses as electives: PHYS 110-4, PHYS 111-4, MATH 100-3 and MATH 101-3.

**Majors in Community and Population Health**

Students pursuing a major in either Community and Population Health-Aboriginal and Rural Health, or Community and Population Health-Environmental Health are required to complete the following ~~27~~<sup>33</sup> credit hours. It is recommended that students take the courses listed below in the year of study indicated:

**1st year - 9 credit hours**

CHEM 110-3 Chemistry of Everyday Life  
or CHEM 100-3 General Chemistry I  
ECON 210-3 Introduction to Health Economics and Policy  
One of:  
ENGL 100-3 Introduction to Literary Structures  
ENGL 102-3 Introduction to Poetry  
ENGL 103-3 Introduction to Fiction  
ENGL 104-3 Introduction to Film

**2nd year - 6 3 credits**

HHSC 102-3 Introduction to Health Science II: Rural and Aboriginal Issues  
~~HHSC 110-3 Basic Microbiology~~  
or ~~BIOL 203-3 Microbiology~~

**3rd year - 9 6 credits**

~~HHSC 330-3 Health Information Management Technology~~  
HHSC 370-3 Occupational Health  
HHSC 301-3 Pathophysiology

**4th year - 9 credits**

HHSC 421-3 Medical Geography  
or ENV5 306-3 Human Ecology  
HHSC 473-3 Health Promotion  
SOCW 444-3 Social Work Critical Issues in Aging

In addition to the ~~33~~<sup>27</sup> credit hours listed above, students pursuing a major in either Community and Population Health-Aboriginal and Rural Health, or Community and Population Health-Environmental Health, are required to complete 12 credit hours focused in either Aboriginal and Rural Health or Environmental Health, specific to their major, as listed below.

**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  
POLS 403-3 Social and Health Policy and Administration  
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  
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 344-3 Society, Policy and Administration of Natural Resources  
POLS 403-3 Social and Health Policy and Administration

### ~~Elective and Academic Breadth for all BHSc Majors~~ **Elective and Academic Breadth for all BHSc Majors**

Electives at any level sufficient to ensure completion of a minimum 122 credit hours including any additional credits necessary to meet the Academic Breadth requirement of the University (see Academic Regulation 15). It is highly recommended that students complete the optional course HHSC 105-3 Functional Anatomy before HHSC 111-4 Anatomy and Physiology I.

### **Bachelor of Health Sciences Honours (BHSc, Honours)**

~~Admission~~ Entry to the ~~h~~ Honours ~~p~~ Program takes place after the end of the second year (i.e., upon completion of 60 credit hours) and requires a minimum CGPA of 3.33 over the most recent 30 credit hours or permission of the School Chair. Consultation with Student Advising is highly recommended before applying. Attaining the minimum requirement does not guarantee ~~admission~~ entry to the honours program, which is at the discretion of the School Chair. Subsequent to ~~admission~~ entry and to remain in the honours program, students must maintain a minimum ~~S~~GPA of 3.33 in each semester. All honours students complete a thesis project (HHSC 490-6 Honours Thesis) under the direct supervision of a faculty member.

To be awarded the BHSc Honours degree, students are required to complete 128 credit hours. This consists of ~~56~~ 67 credit hours of common requirements for all BHSc students, with the remainder coming from the following ~~M~~ajors, and electives, as follows:

**Biomedical Studies:** ~~45~~ Students take 34 credit hours of courses from the Biomedical Studies ~~m~~Major; 18 elective credit hours of which at least 3 credit hours must be at the Health Sciences upper level; and the following 9 Honours credit hours:

HHSC 490-6 Honours Thesis  
HHSC 497-3 Senior Seminar

### **Community and Population Health - Aboriginal and Rural Health:**

~~33~~ Students take 27 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 chosen) in Aboriginal and Rural Health related courses; ~~48~~ 13 credit hours are obtained from elective credit hours; and the following 9 Honours credit hours:

HHSC 490-6 Honours Thesis  
HHSC 497-3 Senior Seminar

**Community and Population Health - Environmental Health:**

Students take ~~33~~ 27 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 chosen) in Environmental Health-related courses; ~~48~~ 13 credit hours are obtained from elective credit hours; and the following 9 Honours credit hours:

HHSC 490-6 Honours Thesis  
HHSC 497-3 Senior Seminar

The minimum requirement for completion of a BHSc Honours is 128 credit hours.

All Honours Thesis research must comply with the Research Ethics Board requirements and is carried out at the discretion of the ~~program~~ School of Health Sciences.

**S-201312.04**

**Changes to Calendar Description — Bachelor of Health Sciences (Removal of HHSC 420-3 and HHSC 430/630)**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the calendar changes for the Bachelor of Health Sciences be approved as proposed: removal of HHSC 420-3 Interdisciplinary Child Welfare and HHSC 430/630-3 Toxicology & Environmental Health courses.

Effective date: January 2014

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]):

**Page 155, 2013/2014 Calendar  
2nd 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  
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 344-3 Society, Policy and Administration of Natural Resources  
POLS 403-3 Social and Health Policy and Administration

### **S-201312.05**

#### **Changes to Calendar Description — Master of Social Work (List of Electives)**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the addition of SOCW 640-3 Social Work Supervision and Leadership to the list of MSW Electives, on page 108 of the 2013/2014 graduate calendar, be approved as proposed.

Effective date: January 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]):

#### **Electives**

SOCW 604-3\* Directed Readings  
SOCW 610-3 Wellness: Alternate Approaches  
SOCW 613-3 Clinical Social Work Practice  
SOCW 615-3 Multi-Cultural Social Work Practice  
SOCW 620-3 Policy Making/Human Services  
SOCW 621-3 Comparative Welfare Analysis  
SOCW 640-3 Social Work Supervision and Leadership  
SOCW 651-3 Legal Issues for Women  
SOCW 698-3 Special Topics  
SOCW 701-3 Research Practicum

Thesis students are required to take ~~a total of~~ two electives. Those two electives may be taken from the two lists immediately above, and/or from other UNBC graduate programs, and/or from other accredited Canadian universities via approved transfer agreements (e.g., the Western Deans' Agreement).

Practicum students are required to take ~~a total of~~ three electives, one of which must come from the two lists of courses immediately above. The two other electives may come from the above lists and/or be taken from other UNBC graduate programs and/or from other accredited Canadian universities via approved transfer agreements (e.g., the Western Deans' Agreement).

\* Students may only take SOCW 604-3 Directed Readings course once for 3 credits.

### **S-201312.06**

#### **Changes to Degree Requirements and Calendar Description for the Major in Biology**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the change(s) to the degree requirements and calendar description for the Major in Biology, on page 79-80 of the 2012/2013 undergraduate calendar, be approved as proposed.

Effective date: September 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]):

#### **200 Level**

BIOL 201-3	Ecology
BIOL 202-3	Invertebrate Zoology
BIOL 203-3	Microbiology
BIOL 204-3	Plant Biology
BIOL 210-3	Genetics
CHEM 201-3	Organic Chemistry I
CHEM 203-3	Organic Chemistry II

CHEM 204-3            Introductory Biochemistry  
MATH 240-3            Basic Statistics

Two of:

~~ENSC 201-3            Introduction to Atmospheric Science~~  
~~ENSC 202-3            Introduction to Aquatic Systems~~  
~~FSTY 205-3            Introduction to Soil Science~~  
~~GEOG 210-3            Geomorphology~~

Students must also take 6 additional credit hours of courses at the 200 level or above. Students are encouraged to explore a diversity of courses during their undergraduate biology education. While biology content is not specifically required, biology students may find relevant courses among the following prefixes: ANTH, BCMB, CHEM, ENPL, ENSC, ENVS, FNST, FSTY, GEOG, HHSC, INTS, NOLS, NREM, NORS, ORTM, PHIL, PHYS, POLS, PSYC, and STAT.

It is recommended that students consult with a Student Advisor in terms of their interests and the content of various courses.

**S-201312.07**

**Changes to First Year Biology Degree Requirements — Majors and Minors Listed in Appendix A**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the change(s) to the first year biology degree requirements for the Majors and Minors listed in Appendix A be approved as proposed.

Effective date: 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]):

**Lower Division Requirement**

100 Level

~~BIOL 101-4            Introductory Biology I~~  
~~BIOL 102-4            Introductory Biology II~~  
~~BIOL 103-3            Introductory Biology I~~  
~~BIOL 104-3            Introductory Biology II~~  
~~BIOL 123-1            Introductory Biology I Laboratory~~  
~~BIOL 124-1            Introductory Biology II Laboratory~~

**Appendix A – List of Majors and Minors Affected and Calendar Pages for Degree Requirement Changes, for Programs Requiring Both Lecture and Lab Components of the Former BIOL 101-4 and BIOL 102-4.**

The following page numbers are from the 2013/2014 PRINT calendar, where the first year biology degree requirements are listed.

Degree	Major	Main page number for major	Format of change	Reference in Notes – page number	Format of Change
BSc	Integrated	73	A		
BSc	Biochemistry and Molecular Biology	78	A		
BSc	Biology	80	A		
BSc	Chemistry	90	A	91 – course selection note	A
BSc	Computer Science and Mathematics joint major	96	B		
BEEd	Education – Education Diploma in a First Nations Language and Culture	108	B		

BSc	Environmental Science	126	A		
BPI	Environmental Planning – Major in Natural Resources Planning	124	B	124 – top right corner note	B
BA	Environmental Studies - Science, Technology and Society	131	A	130 – lower division requirement note	B
BSc	Geography	149	B		
BHSc	Biomedical Studies	154	A		
BSc	Natural Resources Management – Forest Ecology and Management	165	A		
BSc	NRM – Outdoor Recreation and Conservation	167	A		
BSc	NRM – Wildlife and Fisheries	170	A		
BSc	Mathematics	162	B		

Minor	Page number	Format of Change
Biochemistry and Molecular Biology	79	A
Biology	81	A
Biology and Conservation	82	A
Soils and the Environment	129	A

#### Format of changes

A Formatting used where the biology courses are required as part of a major or minor.

~~BIOL 101-4 Introductory Biology I~~  
~~BIOL 102-4 Introductory Biology II~~  
~~BIOL 103-3 Introductory Biology I~~  
~~BIOL 104-3 Introductory Biology II~~  
~~BIOL 123-1 Introductory Biology I Laboratory~~  
~~BIOL 124-1 Introductory Biology II Laboratory~~

B Formatting used in options lists, when the intent is that the lecture and the lab collectively are one selection.

~~BIOL 101-4 Introductory Biology I~~  
~~BIOL 102-4 Introductory Biology II~~  
~~BIOL 103-3 Introductory Biology I~~  
and ~~BIOL 123-1 Introductory Biology I Laboratory~~

~~BIOL 104-3 Introductory Biology II~~  
and ~~BIOL 124-1 Introductory Biology II Laboratory~~

#### **S-201312.08**

#### **Changes to First Year Degree Requirements for the Major in Computer Science and Requirements for the Certificate of Traditional Environmental Knowledge**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the changes to the first year degree requirements for the BSc Major in Computer Science, on page 95 of the 2013/2014 print calendar, and the Certificate of Traditional Environmental Knowledge (effective 2014/2015 title to be Certificate of Traditional Ecological Knowledge in accordance with Senate motion S-201308.07), on page 144 of the print calendar, be approved as proposed.

Effective date: September 2014

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]):

#### **Computer Science**

##### General Science Requirement

Students must take two courses from the following list of science courses. It is recommended that computer

science majors take PHYS 110-4 and PHYS 111-4. However, students may take any two courses from the following list, according to their interests, to fulfill the general science requirement:

PHYS 110-4 Introductory Physics I: Mechanics

....

~~BIOL 101-4 Introductory Biology I~~

~~BIOL 102-4 Introductory Biology II~~

BIOL 103-3 Introductory Biology I

BIOL 104-3 Introductory Biology II

.....

GEOG 210-3 Geomorphology

### **Traditional Ecological Knowledge**

Three courses (at least 9 credit hours) from:

~~BIOL 101-4 Introductory Biology I~~

~~BIOL 102-4 Introductory Biology II~~

BIOL 103-3 Introductory Biology I

BIOL 104-3 Introductory Biology II

BIOL 201-3 Ecology

CHEM 100-3 General Chemistry I

CHEM 101-3 General Chemistry II

ENPL 104-3 Introduction to Planning

ENSC 201-3 Introduction to Atmospheric Science

#### **S-201312.09**

##### **Course Deletions — BIOL 101-4 and BIOL 102-4**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the courses BIOL 101-4 and BIOL 102-4 be deleted and removed from page 208 of the print calendar.

Effective date: September 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]):

~~BIOL 101-4 Introductory Biology I~~

~~This course is an introduction to the biological sciences including nature of life, cell structure, function, development, metabolism, genetics and evolutionary theory.~~

~~Prerequisites: Biology 11 or Biology 12~~

~~Precluded: BIOL 100-4~~

~~BIOL 102-4 Introductory Biology II~~

~~This course is a survey of living organisms, plant and animal form and function, ecology and population biology.~~

~~Prerequisites: Biology 11 or Biology 12 or BIOL 101-4~~

~~Precluded: BIOL 100-4~~

~~Recommended: BIOL 101-4~~

#### **S-201312.10**

##### **Changes to Degree Requirements — BA Joint Major in Economics and International Studies**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the calendar changes to the degree requirement for BA Joint Major in Economics and International Studies be approved as proposed: add ECON 401-3 as a substitute of ECON 308-3 and add ECON 404-3 as a substitute of ECON 321-3.

Effective date: September 2014

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]):

## Joint Major in Economics/ International Studies

Joint majors are designed for students interested in a combination of two related fields of study. They normally involve a specific set of course requirements selected to provide solid specialization in each of the two fields. The graduation requirements for a Joint Major can normally be met in four years of study.

### Curriculum

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

#### Lower-Division Requirement

ECON 100-3	Microeconomics
ECON 101-3	Macroeconomics
ECON 120-3	Globalization and <u>The World's Economies</u>
ECON 202-3	History of Economic Thought
or ECON 203-3	Canadian Economic History
ECON 205-3	Statistics for the Social and Management Sciences
INTS 101-3	Canada and the World
INTS 205-3	Introduction to International Studies

One of:

INTS 200-3	Contemporary Russia
INTS 202-3	Contemporary United States
INTS 203-3	Contemporary Japan
INTS 204-3	Contemporary China
INTS 240-3	Contemporary Circumpolar North

#### Upper-Division Requirement\*

INTS 310-3	Origins and Evolution of International Studies
ECON 308-3	International Economic Relations
or ECON 401-3	<u>Global Economy and Development</u>
ECON 310-3	Intermediate Microeconomic Theory
ECON 311-3	Intermediate Macroeconomic Theory
ECON 321-3	Economics of Developing Countries
or ECON 404-3	<u>Poverty, Inequality and Development</u>

Fifteen additional credit hours of 300- or 400-level International Studies courses.

Six additional credit hours of 300- or 400-level Economics courses.

\* Students must ensure that all prerequisites are fulfilled prior to registering in any courses. Note that MATH 152 is a prerequisite for ECON 310.

#### Language Requirement

Twelve credit hours of International Studies language courses. At least two courses must be in one language.

#### 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 credits necessary to meet the Academic Breadth requirement of the University (see Academic Regulation 15).

**S-201312.11**

**Changes to Degree Requirements — Joint Major in English and Political Science**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the changes to the joint major in English and Political Science, on page 115 of the 2013/2014 undergraduate calendar, be approved as proposed.

Effective date: January 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]):

Joint Major in English/Political Science

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

Program Requirements

One of:

<a href="#">ENGL 200-3</a>	Gender and Literary Theory
<a href="#">ENGL 300-3</a>	Theory
<a href="#">ENGL 400-3</a>	Contemporary Theory

Lower-Division Requirement

<a href="#">ECON 205-3</a> or <a href="#">STAT 240-3</a>	Statistics for the Social and Management Sciences Basic Statistics
<a href="#">ENGL 211-3</a>	Survey of English Literature I
<a href="#">ENGL 212-3</a>	Survey of English Literature II
<a href="#">POLS 100-3</a>	Contemporary Political Issues
<a href="#">POLS 200-3</a>	Canadian Government and Politics
<a href="#">POLS 202-3</a>	<del>Comparative Government and Politics</del> <u>Canada in Comparative Perspective</u>
<a href="#">POLS 270-3</a>	Political Philosophy: <del>Plato to Hobbes</del> <u>Antiquity to Early Modernity</u>
<a href="#">POLS 290-3</a>	Research and Writing for Political Science

One of:

<a href="#">ENGL 100-3</a>	Introduction to Literary Structures
<a href="#">ENGL 102-3</a>	Introduction to Poetry
<a href="#">ENGL 103-3</a>	Introduction to Fiction
<a href="#">ENGL 104-3</a>	Introduction to <del>Drama and/or</del> Film

Two of:

<a href="#">ENGL 210-3</a>	Women and Literature: A Survey
<a href="#">ENGL 280-3</a>	Shakespeare
<a href="#">ENGL 281-3</a>	Introduction to Renaissance Literature
<a href="#">ENGL 282-3</a>	Introduction to Restoration and 18th Century Literature
<a href="#">ENGL 283-3</a>	Introduction to Romantic Literature
<a href="#">ENGL 284-3</a>	Introduction to Victorian Literature

<a href="#">ENGL 285-3</a>	Modern British Literature
<a href="#">ENGL 381-3</a>	<del>Renaissance Literature</del>
<a href="#">ENGL 382-3</a>	<del>Restoration and 18th Century Literature</del>
<a href="#">ENGL 383-3</a>	<del>Romantic Literature</del>
<a href="#">ENGL 384-3</a>	<del>Victorian Literature</del>
<a href="#">ENGL 386-3</a>	<del>19th Century Literature in the United States</del>

Upper-Division Requirement

Of the 13 English courses (39 credit hours) required for this joint major, seven courses (21 credit hours) must be at the 300 and/or 400 level, with at least two of those seven courses (6 of those 21 credit hours) at the 400 level.

<a href="#">POLS 303-3</a>	Democracy and Dictatorship
<a href="#">POLS 370-3</a>	<del>Political Philosophy: Locke to Marx</del>
	<u>Political Philosophy: Early Modernity to Post-Modernity</u>

Two of:

<a href="#">ENGL 320-3</a>	First Nations Literature
<a href="#">ENGL 331-3</a>	Genres in Canadian Literature
<a href="#">ENGL 340-3</a>	Postcolonial Literature
<a href="#">ENGL 350-3</a>	Comparative Literature
<a href="#">ENGL 381-3</a>	<u>Renaissance Literature</u>
<a href="#">ENGL 382-3</a>	<u>Restoration and 18th Century Literature</u>
<a href="#">ENGL 383-3</a>	<u>Romantic Literature</u>
<a href="#">ENGL 384-3</a>	<u>Victorian Literature</u>
<a href="#">ENGL 386-3</a>	<u>19th Century Literature in the United States</u>
<a href="#">ENGL 410-3</a>	Contemporary Women's Literature
<a href="#">ENGL 420-3</a>	<del>Advanced Special Topics in First Nations Literature</del>
<a href="#">ENGL 430-3</a>	Special Topics in Canadian Literature
<a href="#">ENGL 440-3</a>	<del>Postcolonial Literature</del>   <u>Special Topics in Postcolonial Literature</u>
<a href="#">ENGL 450-3</a>	Special Topics in Comparative Literature

One of:

<a href="#">POLS 313-3</a>	<del>Women and Politics</del>
<a href="#">POLS 317-3</a>	<del>Politics and Ethics</del>
<a href="#">POLS 325-3</a>	<del>Canadian Politics and Identity</del>

One 300-level POLS course

One of:

<a href="#">POLS 400 (3-6)</a>	<del>Classics in Political Theory</del>
<a href="#">POLS 472-3</a>	<del>Contemporary Theories of Political Communities</del>

One 400-level POLS course

Five additional English courses (15 credit hours). Up to two of the following ancillary courses (up to 6 credit hours) may be counted among those five additional courses:

<a href="#">WMST 209-3</a>	<del>Gender and Cultural Studies: An Introduction</del>
<a href="#">WMST 306-3</a>	Indigenous Women: Perspectives

<a href="#">WMST 309-3</a>	Gender and Film
<a href="#">WMST 311-3</a>	History of <del>Feminist Theories</del> <u>Feminism</u>
<a href="#">WMST 401-3</a>	Cultural Studies: Gender, Race and Representation
<a href="#">WMST 411-3</a>	Contemporary Feminist Theories

Three additional courses (9 credit hours) of Political Science at the 300 or 400 level.

#### Elective and Academic Breadth Requirement

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](#)).

#### **S-201312.12**

##### **Changes to Letter of Permission Paragraph for the Nursing Programs**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the changes to the Letter of Permission paragraph for the Nursing programs, on page 180 of the 2013-2014 undergraduate calendar, be approved as proposed.

Effective date: September 2014

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]):

#### **Letter of Permission**

Once admitted to the ~~n~~Nursing ~~p~~Program, students who want to take course work at other institutions for transfer credit towards the degree ~~may~~ require a Letter of Permission prior to registration in the course. A student who has committed an academic offense may be denied a Letter of Permission for subsequent coursework. Students who complete courses without having first obtained a Letter of Permission risk not having those courses accepted for transfer credit. Students should contact the Nursing Advisor at the institution they are currently attending for further information. (Refer to Academic Regulation 19 in this Calendar).

#### **S-201312.13**

##### **Approval of Block Transfer Credit from Langara College Social Service Worker Certificate and Diploma**

Zahir

That, on the recommendation of the Senate Committee on Academic Affairs, block transfer credit from Langara College Social Service Worker Certificate and Diploma to the UNBC School of Social Work Bachelor of Social Work Degree be approved as proposed and placed on the BC Transfer Guide.

Effective date: September 2014

CARRIED.

#### **S-201312.14**

##### **Changes to Program Requirements — Indigenous/Cultural Area of Specialization within the curriculum for the BA in Nature-based Tourism Management**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the changes to the Indigenous/Cultural Area of Specialization within the curriculum for the BA in Nature-based Tourism Management, on page 174 of the 2013/2014 undergraduate calendar, be approved as proposed.

Effective date: September 2014

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]):

## **Indigenous/Cultural Tourism**

FNST 100-3 The Aboriginal Peoples of Canada

or ~~HIST 140-3 Indigenous~~ HIST 215-3 Global History of Indigenous People

FNST 203-3 Introduction to Traditional Ecological Knowledge

One of:

ENPL 208-3 First Nations Community and Environmental Planning

FNST 217-3 Contemporary Challenges Facing Aboriginal Communities

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~~

HIST 390-3 Aboriginal People in Canada

NORS 321-3 Peoples and Cultures of the Circumpolar World I

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

### **S-201312.15**

#### **Changes to Degree Requirements and Calendar Description — BSc Honours - Physics**

Dale

That, on the recommendation of the Senate Committee on Academic Affairs, the changes to the description of the BSc Honours - Physics degree requirements on p. 187 of the 2013-2014 Undergraduate Calendar be approved as proposed.

Effective date: September 2014

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]):

#### **BSc Honours– Physics**

The Honours Program in Physics offers students a higher level of physics education and physics research experience for proceeding to postgraduate studies in physics or related fields. Honours students must complete the program requirements for the BSc degree in Physics (Major in Physics). In addition, they must complete PHYS 402 for a minimum of 3 credit hours and submit for approval an undergraduate thesis or research project report under the supervision of a faculty member.

### **S-201312.16**

#### **Revisions to Policy — “Animal Care and Use”**

Sanborn

That, on the recommendation of the Senate Committee on Academic Affairs, updates and minor revision to the Animal Care and Use Policy be approved as proposed.

Effective date: January 2014

CARRIED.

**“For Information” Items:**

**SCAAF201312.08**

**Changes to Course Title and Calendar Description — ENVS 309-3**

Dale

That the changes to the course title and calendar description for ENVS 309-3 Women and Environmental Studies, be approved as proposed.

Effective date: September 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]):

**ENVS 309-3 Women and Environmental Studies**

~~An analysis of various perspectives on women in science and women in environmental studies, including concepts such as ecological feminism.~~

~~Prerequisites:~~

~~None~~

**ENVS 309-3 Gender and Environment**

This course is an introduction to theories, concepts, and approaches for understanding relationships between gender and the environment. It considers the evolution and utility of approaches such as ecofeminism. It also examines links between gender and the following: science; environmental domains and professions; environmental management; conservation and recreation; and environmental impacts.

Prerequisites: None

**SCAAF201312.17**

**Changes to Course Prerequisites — BIOL 201-3, 202-3, 203-3, 204-3, 210-3, 301-3, 307-3, 308-3, 318-3, 421-3, CHEM 204-3, ENSC 202-3, FSTY 201-3, FSTY 207-1, FSTY 209-4, NREM 204-3, and PHYS 304-3**

Dale

That the prerequisite changes listed for BIOL 201-3, 202-3, 203-3, 204-3, 210-3, 301-3, 307-3, 308-3, 318-3, 421-3, CHEM 204-3, ENSC 202-3, FSTY 201-3, FSTY 207-1, FSTY 209-4, NREM 204-3, and PHYS 304-3 on pages 208 and 209 (BIOL Prefixes), and pages 211 (CHEM), 238 (ENSC), 250 (FSTY), 268 (NREM), and 279 (PHYS) of the 2013/2014 print calendar be approved as proposed.

Effective date: September 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]):

**BIOL 201-3 Ecology** This course provides students with an understanding of the relationship of the environment to organisms, principles of animal and plant ecology, populations, communities, ecosystems and human ecology.

*Prerequisite:* BIOL 102-4, or BIOL 104-3 and BIOL 124-1

*Prerequisite or co-requisite:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1

**BIOL 202-3 Invertebrate Zoology** Systematics, development and evolution of the invertebrates.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1

**BIOL 203-3 Microbiology** This course introduces students to the classification and biology of prokaryotic and eukaryotic microorganisms, and applications to forestry, agriculture, environmental science, medicine and industry. In the laboratory, students will learn techniques for culturing and characterizing micro-organisms.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1

*Recommended:* BIOL 210-3 and at least one of CHEM 201-3, CHEM 204-3, or CHEM 220-3 (may be taken concurrently)

**BIOL 204-3 Plant Biology** The interrelationships between form and function of the living plant, including systematics, development, physiology and evolution.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1

**BIOL 210-3 Genetics** This course emphasizes principles of both modern and classical genetics.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1

*Prerequisite or Co-requisite:* BIOL 102-4, or BIOL 104-3 and BIOL 124-1

**BIOL 301-3 Systematic Botany** This course introduces students to plant taxonomy and biodiversity, including principles of systematic botany, nomenclature and classification. Special attention is given to the identification of the native regional flora. Students contemplating registration in this course should consult with the instructor before the end of the previous spring term regarding the making of a summer collection for study during the course. This course includes scheduled field trips as a required course component.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1

**BIOL 307-3 Ichthyology and Herpetology** The identification, comparative anatomy and evolution of fishes, amphibians and reptiles. Particular reference is made to species endemic to British Columbia.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1

**BIOL 308-3 Ornithology and Mammalogy** The identification, comparative anatomy and evolution of birds and mammals. Particular reference is made to species endemic to British Columbia.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1

**BIOL 318 Fungi and Lichens** This course uses lectures, field and laboratory exercises to introduce students to the diversity of the Fungal Kingdom, including lichenized fungi. Students learn to recognize fungal and lichen structures and identify taxa. Emphasis is placed upon fungi and lichens in their natural environments, their ecology and physiology, and their importance to ecosystem function. Field trips and labs teach students to collect, isolate and identify fungi and lichens.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1

**BIOL 421-3 Insects, Fungi and Society** The historical, social and economic importance of insects and fungi to human society, including underlying biological and ecological principles.

*Prerequisites:* 60 credit hours which includes BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1; or permission of the instructor

**CHEM 204-3 Introductory Biochemistry** A lecture based course designed to introduce the basic principles of biological chemistry, focusing on the structure, composition and role of proteins, nucleic acids, carbohydrates and lipids in living systems. Other major topics include the nature and functions of enzymes, principles of bioenergetics and the energy-trapping metabolic pathways and their regulation in animals and plants.

*Prerequisites:* CHEM 201-3; BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1

*Co-requisites:* CHEM 203-3

**ENSC 202-3 Introduction to Aquatic Systems** Aquatic systems are central to all areas of life, as well as human endeavours. In addition to being the site of our earliest evolution, aquatic systems are now recognized as fundamental to the regulation of atmospheric gases and so our climate. This course will provide a broad overview of the physical, chemical, geological, and biological aspects of freshwater and marine systems. Human perspectives will focus on the conservation and exploitation of the resources found within and below lakes, rivers and oceans. Introduction to Aquatic Systems will provide a foundation for students wishing to pursue advanced courses in any area of aquatic study.

*Prerequisites:* BIOL 101-4, 102-4 or BIOL 103-3, BIOL 123-1, and BIOL 104-3, BIOL 124-1, CHEM 101-3  
*Recommended:* PHYS 100-4 and MATH 100-3 or MATH 152-3 or permission of the instructor  
*Precluded:* ENVS 202-3

**FSTY 201-3 Forest Plant Systems** This course provides knowledge and understanding of classification, nomenclature and identification, morphology, phenology, range, natural history, evolutionary relationships, and basic ecology of important trees (native and exotic) and forest plant families (woody and herbaceous) in western Canada. The course also provides a survey of plant indicator potential and attributes significant to vegetation management. The course includes the development of a plant collection and field trips are required.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1  
*Co-requisites:* FSTY 205-3

**FSTY 207-1 Terrestrial Ecological Classification** Terrestrial Ecological Classification explores the critical concepts and methodology of classifying terrestrial ecosystems. The course explores the historical context and attributes of several systems of ecological classification. The primary focus is Biogeoclimatic Ecosystem Classification, the standard for natural resource managers in BC. The course also explores regional examples of site classification.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1

**FSTY 209-4 Forest Biology and Silvics** Forest Biology and Silvics explores critical aspects of the biology of forest floor organisms and the autecology of associated regional tree species. The course also examines the biology and ecology of forest ecosystems, the structure and function of forest trees and stands, the influence of biotic and abiotic factors on tree and stand growth, interactions between forest ecosystems and ecological site conditions, and silvicultural attributes of tree species of Western Canada.

*Prerequisites:* BIOL 101-4, or BIOL 103-3 and BIOL 123-1; and BIOL 102-4, or BIOL 104-3 and BIOL 124-1; and FSTY 201-3

**NREM 204-3 Introduction to Wildlife and Fisheries** Introduction to principles of habitat and population biology and management, and human dimensions of wildlife management. Lectures will introduce the life requisites of individual species and compare aquatic and terrestrial systems, and provide an overview of the characteristics needed to estimate parameters of fish and wildlife populations. Labs will emphasize quantification of fish and wildlife habitats.

*Prerequisites:* BIOL 102-4, or BIOL 104-3 and BIOL 124-1; NREM 100-3

**PHYS 304-3 Biophysics** Topics include the physics of biological systems, physical principles and techniques used to study the structure and dynamics of biological membranes.

*Prerequisites:* PHYS 101-4 or 111-4; BIOL 101-4, or BIOL 103-3 and BIOL 123-1

### **SCAAF201312.20**

#### **Changes to Course Credit Hours and Calendar Description — PHYS 402-3**

Dale

That the change(s) to the course credit hours and description for PHYS 402-3 Physics Research Project on page 279 of the 2013/2014 undergraduate calendar, be approved as proposed.

Effective date: September 2014

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]):

PHYS 402-3 (1-6) Physics Research Project

This is an Eexperimental or theoretical research project conducted by the student under the supervision of a faculty member. This course may be repeated to a maximum of 6 credit hours.

Prerequisites: Upper-division standing in a Physics degree and Ppermission of the ~~h~~instructor

Students have completed at least one of the following courses: PHYS 390-3 for experimental research projects, or PHYS 302-3 for theoretical research projects, or PHYS 300-3 for theoretical research project.

**SCAAF201312.22**

**Approval of 2013 Annual Report**

Dale

That the 2013 Annual Report (September 1, 2012 to August 31, 2013) from the Senate Committee on Academic Affairs be approved by the Committee and forwarded to Senate for information.

Effective date: December 4, 2013

CARRIED (consent agenda).

**9.2 Senate Committee on Scholarships and Bursaries**

**Owen**

**“For Information” Items:**

**SCSB20131127.03**

**New Terms and Conditions – Bear and Tori Scholarship**

Dale

That the new Terms and Conditions for the Bear and Tori Scholarship be approved.

Effective date: 2014-2015 Academic Year

CARRIED (consent agenda).

**SCSB20131127.04**

**New Terms and Conditions – Northern Gateway Pipelines Bursary**

Dale

That the new Terms and Conditions for the Northern Gateway Pipelines Bursary be approved.

Effective date: 2013-2014 Academic Year

CARRIED (consent agenda).

**SCSB20131127.05**

**Revised Terms and Conditions – Jim and Noreen Rustad Bursary**

Dale

That the revisions of the terms and conditions for the Jim and Noreen Rustad Bursary be approved.

Effective date: 2014-2015 Academic Year

CARRIED (consent agenda).

**SCSB20131127.07**

**Approval of UNBC Participation in the Lieutenant Governor’s Silver Medal Program**

Dale

That the SCSB Chair will respond to the Lieutenant Governor that UNBC will participate in the Lieutenant Governor’s Silver Medal Program and that Awards and Financial Aid will draft specific criteria for the terms and conditions of selecting an annual recipient for this medal. The Terms and Conditions will be brought forward to the Senate Committee on Scholarships and Bursaries for final approval.

Effective date: November 27, 2013

CARRIED (consent agenda).

**SCSB20131127.08**

**Revisions to Procedures — UNBC Scholars Awards**

Dale

That the revisions to the UNBC Scholars awards procedures be approved.

Effective date: 2014-2015 Academic Year

CARRIED (consent agenda).

**SCSB20131127.09**

**Revisions to Procedures — Undergraduate Entrance Awards**

Dale

That the revisions to the Undergraduate Entrance awards procedures be approved.

Effective date: 2014-2015 Academic Year

CARRIED (consent agenda).

**SCSB20131127.10**

**Revisions to Procedures — Graduate Entrance Awards**

Dale

That the revisions to the Graduate Entrance awards procedures be approved.

Effective date: 2014-2015 Academic Year

CARRIED (consent agenda).

**9.3 Steering Committee of Senate**

**Iwama**

**S-201312.17**

**Changes to Search Committee Composition — Policy “Selection Procedures for the Search Committee for the President & Vice-Chancellor” (no material)**

Whitcombe

That, on the recommendation of the Steering Committee of Senate and the Board of Governors, Senate approve the addition of a representative of CUPE to the composition of the President and Vice-Chancellor Search Committee.

Effective date: Immediately upon approval by Senate

CARRIED.

**S-201312.18**

**Affirmation of Appointment of Faculty Member from CASHS on the Search Committee for the President and Vice-Chancellor (no material)**

Whitcombe

That, on the recommendation of the Steering Committee of Senate, Senate affirm the appointment of Dr. John Young as the faculty member from CASHS on the Search Committee for the President and Vice-Chancellor.

Effective date: Immediately upon approval by Senate

CARRIED.

**9.4 Senate Committee on Nominations**

**Zahir**

**“For Approval” Items:**

**S-201312.19**

**Membership Changes to Senate (no material)**

Dale

That, on the recommendation of the Senate Committee on Nominations, and barring further nominations from the floor of Senate, the following candidate, who has met all eligibility requirements to serve on Senate, be appointed as proposed:

Effective date: Immediately upon approval by Senate

**SENATE POSITION TO BE FILLED**

***(except as otherwise noted, all terms begin immediately)***

Faculty member — CSAM (until March 31, 2015)

**CANDIDATE**

Daniel Erasmus

CARRIED.

**S-201312.20**

**Membership Changes to Senate Committees (no material)**

Dale

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 COMMITTEE POSITION TO BE FILLED**

***(except as otherwise noted, all terms begin immediately)***

**Steering Committee of Senate**

Faculty Senator (until March 31, 2016)

**CANDIDATE**

To be determined

Two Senators (Senator Zahir and Senator Murray) allowed their names to stand for appointment to this position. A secret ballot vote was taken and Senator Murray was selected to serve in the position.

**Senate Committee on Honorary Degrees and Other Forms of Special Recognition**

Faculty Senator — CSAM (until March 31, 2015)

To be determined

Senator Whitcombe offered to serve in this position and he was appointed.

CARRIED.

**10.0 S-201312.21**

**Approval of Motions on the Consent Agenda**

Dale

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

CARRIED.

**11.0 Other Business**

**11.1 Report from the Senate Committee on the University Budget**

Senator Whitcombe reported that SCUB was meeting now and that he would like to have a report from that committee added as a standing agenda item so that he can keep Senate informed. He recommended that Senators read the budget guidelines that are currently posted on the UNBC website.

**12.0 Information**

**12.1 Presentation — *Northern Post-Secondary Council***

**Iwama**

Dr. Iwama delivered a presentation on the Northern Post-Secondary Council, noting that the Council is comprised of UNBC and the three northern Colleges, that the group meets at least quarterly to discuss topics they wish to advance, that they have created an action plan, and that they had retained a consultant to help craft a statement regarding FTE numbers at northern institutions. The Council wishes to demonstrate the benefits to the community the institutions provide.

A Senator suggested that Deans and Chairs from all the northern institutions should begin interacting as well, and Dr. Iwama agreed.

**13.0 S-201312.22**

**Move to In Camera Session**

Nitz

That the meeting move In Camera.

CARRIED.

Prior to the adjournment of the Senate meeting, Senators thanked Dr. Iwama for his service to Senate and UNBC.

**14.0 S-201312.26**

**Adjournment**

Whitcombe

That the Senate meeting be adjourned.

CARRIED.

The meeting ended at 4:20 p.m.