

### SENATE MEETING PUBLIC SESSION MINUTES

December 15, 2010 2:30 – 4:30 PM Room 7-172 Bentley Centre

#### Present:

O. Adegbite, J. Alec, E. Annis, G. Ashoughian, S. Beeler, S. Bennett, T. Binnema, R. Brouwer, C. Carriere, D. Casperson, L. Chen, M. Dale, A. Dayanandan, J. DeGrace (Secretary of Senate), H. Donker, G. Fondahl, M. Green, M. Hatcher, R. Hoffman, K. Hutchings (Vice Chair), G. Iwama (Chair), E. Kim, M. Kizhakkeniyil, R. Lazenby, D. Leighton-Stephens, J. Li, J. MacDonald, D. Macknak, F. MacPhail, S. McKenzie, C. Myers (Recording), D. Nyce, D. Ryan, S. Wagner, A. Yakemchuk, J. Young

#### Regrets:

M. Archie, C. Chasteauneuf, S. Déry, W. Haque, E. Jensen, C. O'Callaghan, M. Reid, R. Robinson, J. Van Barneveld, S. Zahir

#### Absent:

I. Uche-Ezeala

The meeting commenced at 2:30 p.m.

#### 1.0 <u>S-201012.01</u>

#### Approval of the Agenda

Annis / Macknak That the Agenda for the December 15, 2010 Public Session of Senate be approved as presented. CARRIED.

#### 2.0 <u>S-201012.02</u>

#### Approval of Senate Minutes

Annis / Donker That the minutes of the November 24, 2010 Public Session of Senate be approved as presented.

A Senator questioned the correctness of this motion, as a quorum was not obtained for the November meeting of Senate. Dr. Iwama responded that, rather than minutes, there should have been a record of proceedings of the meeting.

CARRIED.

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

3.1 The Roles of President's Council and President's Executive Council

This document was provided for the information of Senators. A Senator asked whether Senate could be provided with information regarding the agenda items for these meetings, and Dr. Iwama replied that this information would be easier to provide with regard to President's Council (PC), as only a record of action items was maintained for President's Executive Council (PEC).

#### 3.2 <u>S-201012.03</u>

# Ratification of Motions from Meeting of November 24, 2010 — Report from the Senate Committee on Academic Policy and Planning (no material)

Chasteaneuf / Macknak

That the motions approved at the meeting of November 24, 2010, originating from the Senate Committee on Academic Policy and Planning, be ratified. The motions as passed are presented below, details on pages 24 to 39 of the November 2010 Senate public session package. Effective date: December 15, 2010 CARRIED.

### 3.2.1 Approval of General International Agreement between the University of Northern British Columbia and Wuyi University, China

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the General International Agreement between the University of Northern British Columbia and Wuyi University, China, be approved as proposed.

Effective date: January 1, 2011; formerly motion S-201011.04. CARRIED by ratification vote (motion S-201012.03).

3.2.2 Creation of a Degree in Cooperation with the University of Applied Sciences Northwestern Switzerland, School of Social Work (FHNW) and UNBC

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the creation of a degree in cooperation with the University of Applied Sciences Northwestern Switzerland, School of Social Work (FHNW) and UNBC be approved as proposed.

Effective date: January 1, 2011 to allow applications by February 15; formerly motion S-201011.05.

#### Amendment to motion S-201011.05:

That the phrase "to be reviewed after five years" be included at the end of motion S-201011.05.

The motion as AMENDED was CARRIED by ratification vote (motion S-201012.03).

#### 3.2.3 Revisions to Program Calendar Description — "English Program" to "Department of English"

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change in designation of the English Program to the Department of English, on page 105 of the 2010/2011 undergraduate calendar, be approved as proposed. Effective date: January 2011; formerly motion S-201011.06. CARRIED by ratification vote (motion S-201012.03).

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

English (BA Program)

Dee Horne, Professor<del>, and Program Chair</del> Karin Beeler, Associate Professor<u>, and Department Chair</u> Stan Beeler, Associate Professor Robert Budde, Associate Professor Lisa Dickson, Associate Professor Kristen Guest, Associate Professor Kevin Hutchings, Associate Professor<u>;</u>, and Canada Research Chair <u>in Literature</u>, <u>Culture and Environmental Studies</u>, Romantic Studies: Environment, Culture, and **Representation** 

Maryna Romanets, Associate Professor Blanca Schorcht, Associate Professor and Regional Chair, South-Central Region Linda MacKinley-Hay, Assistant Professor Marian Scholtmeijer, Assistant Professor

Website: http://www.unbc.ca/english

UNBC's English program includes course offerings in Canadian, British, American and International English literatures as well as world literature in English translation, and literary theory. Key areas include First Nations Literature, Canadian Literature, Comparative Literature, Women's Literature, Feminist Criticism and Theory, literature and media technology, and the relationship between literature and other disciplines. Creative writing and other kinds of writing courses are also available. The program encourages interdisciplinarity between literature, cultural studies, and science or technology. Computer literacy is a priority, as is the delivery of courses on the World Wide Web. The interdisciplinary perspective prepares students for a number of graduate or professional programs (e.g. English, Journalism, Creative Writing, Law, Education, Business) or employment in the public or private sectors.

#### Major in English

The major in English requires students to take 18 English courses (54 credit hours), at least 30 credit hours of which must be upper-division courses (300 and 400 level) with at least nine credit hours of these at the 400 level. Students wishing to take more than 66 credit hours in English must obtain written permission from the <u>Department</u> Chair-of the English Program.

The minimum requirement for completion of a Bachelor of Arts with a major in English is 120 credit hours.

## 3.2.4 Revisions to Program Calendar Description — "Computer Science Program" to "Department of Computer Science"

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change in designation of the Computer Science Program to Department of Computer Science on pages 89 and 331 of the 2010/11 undergraduate calendar be approved as proposed.

Effective date: January 2011; formerly motion S-201011.07.

CARRIED by ratification vote (motion S-201012.03).

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

#### (page 89)

### Computer Science (BSc Program)

David Casperson, Assistant Professor<u>; and Program Department</u>Chair Liang Chen, Professor Waqar Haque, Professor Alex Aravind, Associate Professor Charles Brown, Associate Professor Jernej Polajnar, Associate Professor Saif Zahir, Associate Professor Desanka Polajnar, Adjunct Professor Allan Kranz, Senior Lab Instructor (page 331)

#### The Computer Science Entrance Award

This award has been established to encourage and support talented students entering or transferring to undergraduate studies in Computer Science at UNBC.

Donor UNBC Department of Computer Science Program

Value \$1,000

Number Up to Ten

**Eligibility** Available to full or part time undergraduate students entering their first or second year level of studies in Computer Science at UNBC, or transferring from another post-secondary institution into Computer Science at UNBC at any level of undergraduate studies.

Criteria Academic Proficiency and with courses in mathematics and/or computer science

**Conditions** The student must officially declare Computer Science as major. Course enrolment for the year in which the award is held must be approved by the Chair of Computer Science or designate. The award can be held only once.

**Application Instructions** Attach a letter outlining your experience, interest and performance in mathematics and/or computer science to the Awards Application. Photocopies of any awards achieved may be attached. **Recipient Selection Criteria** The Senate Committee on Scholarships and Bursaries, on recommendation of the Department of Computer Science Program. Subject to Available Funding.

Established 2007

#### 3.2.5 Course Deletion — PHYS 215-3

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the course PHYS 215-3 Energy, Physics and the Environment be deleted from the UNBC Undergraduate Calendar as proposed.

Effective date: September 2011; formerly motion S-201011.08. CARRIED by ratification vote (motion S-201012.03).

#### 3.3 <u>S-201012.04</u>

## Ratification of Motion from Meeting of November 24, 2010 — Report from the Steering Committee of Senate (*no material*)

Donker / Ryan

That the motion approved at the meeting of November 24, 2010, originating from the Steering Committee of Senate, be ratified. The motions as passed are presented below, details on page 70 of the November 2010 Senate public session package. Effective date: December 15, 2010

CARRIED.

### 3.3.1 Senate Handbook Revision — Terms of Reference for Senate Committee on Scholarships and Bursaries

That, on the recommendation of the Senate Committee on Scholarships and Bursaries, the Steering Committee of Senate recommend to Senate that the Senate Handbook be revised to include the Development Awards Officer position as a non-voting member of the Senate Committee on Scholarships and Bursaries.

Effective date: Immediately upon approval by Senate; formerly motion S-201011.09. CARRIED by ratification vote (motion S-201012.04).

#### 4.0 President's Report

#### Iwama

Dr. Iwama congratulated Senators on the completion of another term. He reported that he and the Vice Presidents were working on Action Plans in support of the goals of the University Plan, which will be included as an addendum to the University Plan. He added that the potential for a fundraising campaign in support of the University Plan will be discussed at the Board of Governors planning retreat in January 2011. Dr. Iwama noted that Chancellor MacDonald is excited about UNBC distinguishing itself by renewable energy, although there are many themes to be considered in fundraising planning. Dr. Iwama concluded by stating that a document is being drafted for further consideration, as there are many people interested in supporting the fundraising effort and great potential with which to move forward.

On another matter, the President stated that the Steering Committee of Senate has recommended that a Senate-Board Liaison Committee be struck, which would operate as an *ad hoc* committee for the first year. The main purpose of the committee would be to organize the joint Senate-Board retreat. He added

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that the Provost and President would sit on the committee, and requested that the Senate Committee on Nominations nominate one member-at-large from Senate to serve on the committee.

#### 5.0 Report of the Provost

Dr. Dale reported that the candidate for the position of Assistant Provost had been approved by the Board of Governors and she would commence employment on January 4, 2011. In response to a question raised at the previous meeting of Senate, Dr. Dale indicated that the Ministry had stated that there was currently no intention to extend the moratorium on the approval of new degrees. Finally, Dr. Dale reminded Senators that at the last meeting of Senate he had reported that the Senate Committee on Academic Policy and Planning (SCAPP) had struck a Working Group to look into determining a method by which to let go of offerings. He updated Senators, noting that the membership of this Working Group had been approved by SCAPP but they had not yet met.

#### 6.0 Question Period

A Senator asked about the schedule for external reviews, and whether the report from the external review of Graduate Programs would be made available at Senate. Dr. Dale responded that the report would come to Senate after the Dean of Graduate Programs returns. He also indicated that he would report on the external review schedule at the next meeting of Senate, as this information should be available on the website.

#### Action: Dr. Dale to report to Senate with regard to the schedule for external reviews.

A Senator requested that Senate and the Board of Governors be provided with a table outlining the number of employees, according to employee group (CUPE, CUPE Exempt, Administrators and Directors, and Teaching Faculty, including a breakdown by tenured and tenure-track, and non tenure-track), for each of the years from 1994 to the present. Dr. Iwama asked about the rationale for the request, and the Senator responded that having this information available might result in making it easier to plan for, and respond to, potentially difficult financial times in the future. The President thanked the Senator for the request.

#### 7.0 <u>S-201012.05</u>

Approval of Motions on the Consent Agenda Chasteauneuf / Beeler That the motions on the consent agenda, except for those removed for placement on the regular agenda, be approved as presented. CARRIED.

#### 8.0 Committee Reports

#### 8.1 Senate Committee on Academic Policy and Planning

#### "For Approval" Items:

#### S-201012.06

#### New Course Approval — FNST 217-3

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the new course FNST 217-3 Contemporary Challenges in Aboriginal Communities be approved as proposed. Proposed Semester of First Offering: January 2011 CARRIED (consent agenda).

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

Page 5 of 33

Dale

This is a survey course focusing on the contemporary challenges faced by Aboriginal peoples in Canada. In this course students research and participate in seminars on the specific challenges facing Aboriginal communities today. This includes specific challenges that arise out of the broader topic areas of language and culture, land rights, economics, governance, youth, education, health, social services, violence, healing, community development, repatriation of cultural property, and decolonization.

#### S-201012.07

#### Revision to Course Number — FNST 250-3

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change to the course number for FNST 250-3 Canadian Law and Aboriginal People, to FNST 350-3, on page 101, 114, 115, 131, 159, and 222 of the 2010/2011 undergraduate calendar, be approved as proposed. Effective date: January 2011 CARRIED (consent agenda).

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

#### Page 101

General Academic Coursework

The required general academic coursework of 18 credit hours can be met with the following courses- (<u>Ss</u>ome of these credit <u>hours</u> may be completed as part of the Diploma in First Nations Language):

3 credit <u>hour</u>s English Composition-Suggested: ENGL 170-3 or equivalent 3 credit <u>hour</u>s English Literature-Suggested: ENGL 103-3, ENGL 120-3, ENGL 210-3, ENGL 260-3 or equivalent 3 credit <u>hour</u>s Mathematics-Suggested: MATH 190-4 or equivalent 3 credit <u>hour</u>s Lab Sciences-Suggested: BIOL 101-4, BIOL 110-3 and BIOL 111-1, or equivalent 6 credit <u>hour</u>s of Canadian Studies (3 credit <u>hour</u>s History and 3 credit <u>hour</u>s Geography recommended) - Suggested: FNST 100-3, <del>FNST 250-3</del>, GEOG 203-3, HIST 210-3, HIST 302-3 or equivalent

#### Page 114

Three of: ANTH 101-3 Peoples and Cultures ENVS 306-3 Human Ecology (regional campus only) FNST 100-3 The Aboriginal Peoples of Canada <del>FNST 250-3 Law and Aboriginal Peoples</del> FNST 216-3 Issues in Internal Organization for Contemporary Indigenous People GEOG 100-3 Environments and People GEOG 101-3 Human Geography GEOG 206-3 Social Geography GEOG 200-3 Geography of BC GEOG 202-3 Economic Geography INTS 205-3 Introduction to International Studies MATH 115-3 Precalculus

POLS 100-3 Contemporary Political Issues

POLS 220-3\* Canadian Law and Aboriginal Peoples

POLS 251-3 Local Services and Public Policy

POLS 260-3 Politics of Public Finance

SOCW 201-3 Introduction to Social Welfare

Three of:

ANTH 316-3 The Social Theory and Structure of Contemporary Canadian Society ANTH 413-3 Topics in Environmental Anthropology ENVS 325-3 Global Environmental Change: Science and Policy ENSC 404-3 Waste Management ENSC 302-3 Energy Development ECON 411-3 Cost Benefit Analysis FNST 350-3 Law and Aboriginal Peoples GEOG 322-3 Economic Geography of Northern BC GEOG 305-3 Political Geography GEOG 403-3 Aboriginal Geography GEOG 424-3 Social Geography of Northern BC POLS 302-3 Canadian Public Administration POLS 316-3 Municipal Government and Politics POLS 320-3 Canadian Politics and Policy POLS 332-3 Community Development POLS 335-3 Community Politics POLS 415-3 Comparative Northern Development POLS 434-3 Resource Communities in Transition NREM 306-3 Society, Policy and Administration

SOCW 320-3 Critical Social Policy

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Lower-Division Requirements for Major in First Nations Planning

BIOL 110-3 Introductory Ecology

FNST 100-3 The Aboriginal Peoples of Canada

FNST 250-3 Canadian Law and Aboriginal Peoples

FNST 131-3 First Nations Language Level

Upper-Division Requirements for Major in First Nations Planning

FNST 304 -3First Nations Environmental Philosophy and KnowledgeFNST 350-3Canadian Law and Aboriginal PeoplesENPL 409-4Advanced First Nations Community and Environmental Planning

#### Page 131

Certificate Requirements COMM 210-3 Financial Accounting ECON 101-3 Macroeconomics ENGL 170-3 Writing and Communication Skills or ARTS 102-3 Research Writing FNST 100-3 The Aboriginal Peoples of Canada POLS 100-3 Contemporary Political Issues POLS 200-3 Canadian Government and Politics POLS 220-3 Canadian Law and Aboriginal Peoples or FNST 250-3 Canadian Law and Aboriginal Peoples POLS 340-3 First Nations Self-Government and Administration Two of: FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples FNST 216-3 Issues in Internal Organization for Contemporary Indigenous Peoples

#### Page 159

Stream 1 Autonomy and Self-Government ECON 407-3 The Economy of Northern BC FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples / FNST 216-3 Issues in External Relations Internal Organization for Contemporary **Indigenous Peoples** FNST 250-3 Canadian Law and Aboriginal Peoples/ POLS 220-3 Canadian Law and Aboriginal Peoples **INTS 377-3 Redefining Security** INTS 410-3 Environment and Development in the Circumpolar North **INTS 444-3 Russian Foreign Policy** POLS 340-3 First Nations Self-Government and Administration POLS 412-3 Comparative Aboriginal State Relations POLS 414-3 Comparative Federalism POLS 415-3 Comparative Northern Development POLS 472-3 Contemporary Theories of Political Community WMST 306-3 Indigenous Women: Perspectives

#### Page 222

FNST <u>350-3</u> Canadian Law and Aboriginal Peoples

An examination of the constitution, Indian Act, treaties, court decisions, and laws as they relate to the government and politics of aboriginal peoples.

*Prerequisites:* FNST 100-3 or POLS 100-3 *Precluded:* POLS 220-3 <u>*Precluded:* FNST 250-3</u>

#### Page 259

POLS 220-3 Canadian Law and Aboriginal Peoples An examination of the constitution, Indian Act, treaties, court decisions, and laws as they relate to the government and politics of aboriginal

peoples.

*Prerequisites:* POLS 100-3 or FNST 100-3, or permission of the instructor *Precluded:* FNST 250-3

#### S-201012.08

#### New Course Approval — ANTH 240-3

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the new course ANTH 240-3 The Neandertals be approved as proposed. Proposed Semester of First Offering: May 2011 CARRIED (consent agenda).

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

This course examines conceptions and misconceptions of the most enigmatic of our ancestors, the Neandertals. Since first discovered in 1848 Neandertals have occupied a special place in the story of human evolution - they have been pathologized, idealized, and romanticized. Neandertals have generated more controversy surrounding human evolution than any other ancestor. This course examines aspects of biology, culture, symbolic behaviour, and subsistence, considering Neandertal origins and 'disappearance,' as well as considering how Neandertals have been represented in 'popular culture' over the past 150 years.

#### S-201012.09

#### New Course Approval — ANTH 250-3

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the new course ANTH 250-3 The Ancient Egyptians be approved as proposed. Proposed Semester of First Offering: May 2011 CARRIED (consent agenda).

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

This course is a survey of the development and workings of ancient Egyptian state society. The course begins with the pre-Dynastic Period and ends with the Ptolemaic Period, but the major focus is on the Dynastic Period. Using a combination of archaeological and documentary evidence, the course examines ancient Egyptian history, politics, technology, cosmology, and other aspects of everyday life.

#### S-201012.10

#### Revisions to Calendar Course Description — BCMB 401-3

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change to the calendar description for BCMB 401-3 Basic Science of Oncology be approved as proposed to reflect the addition of a minimum grade for the prerequisites. Effective date: September 2011 CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by strikethrough, new text indicated by <u>underline</u>, 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 controlling gene expression.

*Prerequisites:* BCMB 330-3 or CHEM 330-3 <u>with a minimum grade C in all prerequisite courses</u> *Precluded:* CHEM 405-3

#### S-201012.11

#### Revisions to Calendar Course Description — BCMB 402-3

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change to the calendar description for BCMB 402-3 Macromolecular Structure be approved as proposed to reflect the addition of a minimum grade for the prerequisites. Effective date: September 2011 CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by strikethrough, new text indicated by <u>underline</u>, 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; <u>s. S</u>tudents 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:* BCMB 307-3, CHEM 307-3, BCMB 330-3 or CHEM 330-3 <u>with a minimum grade of C in all prerequisite</u> <u>courses</u>

Precluded: CHEM 405-3

#### S-201012.12

#### Revisions to Calendar Course Description — BCMB 403-3

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change to the calendar description for BCMB 403-3 Advanced Nucleic Acids be approved as proposed to reflect the addition of a minimum grade for the prerequisites. Effective date: September 2011 CARRIED (consent agenda).

Details of the approved calendar text are as follows (for revisions, deleted text indicated by strikethrough, new text indicated by <u>underline</u>, 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 applications of RNA molecules.

*Prerequisites:* BCMB 330-3 or CHEM 330-3 <u>with a minimum grade of C in all prerequisite courses</u> *Precluded:* CHEM 405-3

#### S-201012.13

#### **Revisions to Calendar Course Description — BCMB 405-3**

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change to the calendar description for BCMB 405-3 Topics in Biochemistry and Molecular Biology be approved as proposed to reflect the addition of a minimum grade for the prerequisites. Effective date: September 2011 CARRIED (consent agenda).

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

#### **BCMB 405-3 Topics in Biochemistry and Molecular Biology**

This course considers selected advanced topics in biochemistry. Topics depend on instructor and student interest and normally focus on material not dealt with in other courses. Note: Credit may be granted for both 400- and 600-level offerings of Topics in <u>Chemistry Biochemistry and Molecular Biology</u> courses, and either the 400- or 600-level <u>courses</u> or a combination of both may be repeated to a maximum of 6 credit hours, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or College Dean).

Prerequisites: BCMB 330-3, BCMB 307-3, BCMB 340-3 with a minimum grade C in all prerequisite courses

#### S-201012.14

#### Revisions to Calendar Description — Major in Biochemistry and Molecular Biology

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change to the calendar description for the major in Biochemistry and Molecular Biology be approved to reflect the addition of the course HHSC 301-3 for subject requirement. Effective date: September 2011 CARRIED (consent agenda).

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

### Major in Biochemistry and Molecular Biology

The major in Biochemistry and Molecular Biology requires students to take at least 85 credit hours of Biochemistry and Molecular Biology\_oriented courses, of which 42 credit hours must be 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 129 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 I CHEM 255-1 Biochemistry Lab I BCMB 255-1 Biochemistry Lab I MATH 240-3 Basic Statistics or MATH 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 409-3 Enzymology One of: BCMB 401-3 Basic Science of Oncology BCMB 402-3 Macromolecular Structure BCMB 403-3 Advanced Nucleic Acids

#### Subject Requirements

Twelve additional credit hours chosen from the following, of which at least six <u>6</u> credit hours must be at the 300 or 400 level. Note: NRES 430-6 can count towards this requirement with permission of the Program Chair.

Any 200-level or above BCMB, BIOL or CHEM courses PSYC 317-3 Psychobiology PSYC 318-3 Sensation and Perception CPSC 450-3 Bioinformatics HHSC 430-3 Toxicology and Environmental Health PSYC 419-3 Neuropsychology <u>HHSC301-3 Pathophysiology</u>

#### **Elective Requirements**

Elective credit hours as necessary to ensure completion of 129 credit hours. Note: no more than three <u>3</u> credit hours of continuing education courses may be used towards the BCMB major.

The Registrar suggested that the next four motions be dealt with in an order different from that in which they were presented on the agenda, as a result of the fact that some motions, if carried, would impact

others. It was thus agreed that motion S-201012.16 would be dealt with first, S-201012.18 second, S-201012.17 third, and S-201012.15 fourth.

#### S-201012.16 Change to Program Requirements — Minor in Biology Ryan / Macknak That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change to the requirements for the Minor in Biology, on page 78 of the 2010/2011 undergraduate calendar, be approved as proposed. Effective date: September 2011 CARRIED.

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

#### Requirements

BIOL 101-4 Introductory Biology I BIOL 102-4 Introductory Biology II

One of:

BIOL 201-3 Ecology BIOL 210-3 Genetics

One of:

BIOL 202-3 Invertebrate Zoology BIOL 203-3 Microbiology BIOL 204-3 Plant Biology

One of:

BIOL 301-3 Systematic Botany BIOL 307-3 Ichthyology and Herpetology BIOL 308-3 Ornithology and Mammalogy

#### One of:

BIOL 304-3 Plants, Society and the Environment BIOL 311-3 Cell and Molecular Biology BIOL 321-3 Animal Physiology

Six additional credit hours in Biology at the <u>300 or</u> 400 level.

#### S-201012.18

## Change to Academic Regulation 15 (Academic Breadth) — Movement of Some Prefixes to Different Quadrants

Alec / Ryan

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the changes to Academic Regulation 15 (Academic Breadth) of the undergraduate calendar, to move some prefixes to different quadrants, be approved as proposed. Effective date: September 2010

A Senator noted that there are implications of this motion for other Programs in the College of Arts, Social and Health Sciences which have courses listed in the Arts and Humanities quadrants, and suggested that this proposed revision should have been discussed with these Programs. It was questioned whether this motion proposes that all NRES courses are Arts and Humanities, not Science, courses, and the Registrar replied that it does. The representative from the Program responded that all courses labeled NRES are writing courses and belong in this category.

The implications of the motion were discussed in greater detail, including the history of Senate decisions related to the breadth requirement, the goals of the breadth requirement, and whether a better approach to breadth could be developed.

DEFEATED.

#### <u>S-201012.17</u>

# Change to Academic Regulation 15 (Academic Breadth) — Exemption of BSc Biology and the BSc Natural Resources Management (Majors in Forest Ecology and Management, and Wildlife and Fisheries)

Casperson / Kizhakkeniyil

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the changes to Academic Regulation 15 (Academic Breadth) of the undergraduate calendar, to exempt the BSc Biology and the BSc Natural Resources Management (Majors in Forest Ecology and Management, and Wildlife and Fisheries), be approved as proposed.

Effective date: January 1, 2011

It was suggested that, despite the four motions being re-ordered, it would be constructive to discuss motion S-201012.15 prior to discussing this motion.

#### Motion to postpone:

Binneman / Donker That motion S-201012.17 be postponed until motion S-201012.15 has been discussed. CARRIED.

Senators proceeded to deal with Senate motion S-201012.15. Once that motion was addressed, they returned to address motion S-201012.17.

A Senator questioned the direction of this motion, and suggested that any proposed revisions of this nature be withheld until a review of the current breadth requirement can be undertaken. In response to this Senator, who had become a member of Senate fairly recently, Dr. Dale provided historical background information regarding the evolvement of the breadth requirement at UNBC. It was subsequently suggested by another Senator that this motion be referred back to the Senate Committee on Academic Policy and Planning for further contemplation.

#### Motion to refer:

Casperson / Macknak That motion S-201012.17 be referred back to the Senate Committee on Academic Policy and Planning. CARRIED.

#### S-201012.15

#### Changes to Degree Requirements — Biology B.Sc.

Casperson / MacPhail

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the changes to the degree for Biology B.Sc., on page 78 of the 2009/2010 undergraduate calendar, be approved as proposed.

Effective date: September 2011

A Senator asked what the Senate Committee on Academic Policy and Planning had done to investigate the usefulness of a quadrant-based system of breadth, and added that Biology has undertaken this investigation and believes they have a better approach. The Registrar responded that the implications of this motion are such that, while this motion is specific to the Biology Program, other students would have to be permitted to allow these courses to stand for their breadth requirements. Furthermore, passing this motion would be an invitation to other Programs to change the breadth requirement, essentially unraveling a simple and transparent process. The representative from the Biology Program asserted that the Biology Program had made a serious attempt to incorporate breadth into their degree requirements, and disallowing this proposed revision would undermine that endeavour.

DEFEATED.

#### S-201012.19

**Revisions to Calendar Description — Environmental Engineering Technical Electives List** That, on the recommendation of the Senate Committee on Academic Policy and Planning, the change(s) to the Technical Electives list for Environmental Engineering, on page 112 of the 2010/2011 undergraduate calendar, be approved as proposed. Effective date: September 2010 CARRIED (consent agenda).

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

#### Technical Electives at UNBC

ENSC 302-3 Energy Development

ENSC 404-3 Waste Management

ENSC 406-3 Environmental Modelling

ENSC 408-3 Storms

ENSC 425-3 Global Change Science

ENSC 425-3 Climate Change and Global Warming

ENSC 452-3 Reclamation and Remediation of Disturbed Environments

ENSC 453-3 Environmental Resources Management and Decision Making

FSTY 455-3 Biogeochemical Processes in Soil Systems

ENSC 460-3 Soil Chemical Processes and the Environment

NREM 410-3 Watershed Management

#### <u>S-201012.20</u>

#### **Revisions to Library Collections and Acquisitions Policy**

Annis / Hoffman

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the revisions to the Library Collections and Acquisitions Policy be approved as proposed. Effective date: Immediately upon approval by Senate CARRIED.

#### S-201012.21

#### Revisions to Northern BC Archives and Special Collections Acquisitions Policy Annis / Donker

That, on the recommendation of the Senate Committee on Academic Policy and Planning, the revisions to the Northern BC Archives and Special Collections Acquisitions Policy be approved as proposed. Effective date: Immediately upon approval by Senate CARRIED.

#### S-201012.22

### Request for Annual Budget Allocation of \$5,000 for the Purchase of Artworks for the University's Artworks Collection

Donker / Chasteaneuf

That, on the recommendation of the Senate Committee on Academic Policy and Planning, Senate propose an annual budget allocation of \$5,000 for the purchase of artworks for the University's Artworks Collection. Effective date: Immediately upon approval by Senate CARRIED.

#### "For Information" Items:

#### SCAPP201012.18

#### Revisions to Course Prerequisites — CHEM 100-3

That the change to the course prerequisite for CHEM 100-3, on page 189 of the 2010/2011 undergraduate calendar, be approved as proposed. Effective date: January 2011 CARRIED (consent agenda). Details of the approved calendar text are as follows (for revisions, deleted text indicated by strikethrough, new text indicated by <u>underline</u>, and [commentary, where included, in Courier New font within square brackets]):

CHEM 100-3 General Chemistry I This is the first course in a two-course lecture-based sequence of chemistry courses emphasizing the basic principles of chemistry. Topics include: classification of matter, periodic properties of elements, atomic and molecular structure, stoichiometry, chemical reactions, thermochemistry, chemical bonding, and an introduction to organic chemistry. Students requiring the first-year laboratory courses in their program of study are encouraged to enroll in CHEM 120-1 concurrently.

Prerequisites: Principles of Math 12 or <u>Pre-calculus 12 or</u> MATH 115-3 (or equivalent). Note: MATH 115-3 may be taken concurrently.

#### SCAPP201012.19

**Revisions to Course Prerequisites — CHEM 101-3** That the change to the course prerequisite for CHEM 101-3, on page 189 of the 2010/2011 undergraduate calendar, be approved as proposed. Effective date: January 2011 CARRIED (consent agenda).

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

CHEM 101-3 General Chemistry II This is the second course in a two-course lecturebased sequence of chemistry courses emphasizing the basic principles of chemistry. Topics include: intermolecular forces, properties of solutions, reaction kinetics, chemical equilibrium, acids and bases, applications of aqueous equilibria, entropy and free energy, and electrochemistry. and organic chemistry. Students requiring the first-year laboratory courses in their program of study are encouraged to enroll in CHEM 121-1 concurrently.

Prerequisites: CHEM 100-3, and Principles of Math 12 or Pre-calculus 12 or ; MATH 115-3 (or equivalent) may substitute for Principles of Math 12

#### SCAPP201012.08

#### Revisions to Course Prerequisites — SOCW 402-15

That the change to the course prerequisite for SOCW 402-15 Social Work Field Education 2, on page 266 of the 2010/2011 undergraduate calendar, be approved as proposed. Effective date: September 2011 CARRIED (consent agenda).

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

SOCW 402-15 Social Work Field Education 2 This field placement requires students to perform in a social work role or organizational setting five days per week through the entire term. Field education provides undergraduate students with an opportunity to enhance and refine their social work skills. As much as possible, the assigned field education setting will broadly match the particular type of social work experience that the student wishes to pursue. The course includes three one-day seminars as part of the field education placement.

Prerequisites: all 100-, 200-, and 300- and 400-level requirements; SOCW 401-3, enrolment limited to students admitted to the School of Social Work

#### 8.2 Senate Committee on Research and Graduate Studies

Fondahl / MacPhail

#### "For Approval" Items:

An Executive Summary of the proposed revisions to the Mathematical, Computer, and Physical Sciences Graduate Program was included for information, as was a copy of Senate motion S-201008.36. It was explained that, as a result of the recently-imposed moratorium on the approval of new degrees by the Ministry, a request was being made to rescind a previously-approved motion and revise some other motions in response to this moratorium.

Senate motions S-201012.23 to S-201012.26 were dealt with as an omnibus motion.

#### S-201012.23

#### Rescindment of Senate Motion S-201008.36

Casperson / Donker That, on the recommendation of the Senate Committee on Research and Graduate Studies, motion S-201008.36 approved by Senate on 25 August 2010 be rescinded. Effective date: Upon approval by Senate CARRIED.

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

[Although the following calendar text reflects the rescindment of motion S-201008.36, the following motions (S-201012.24 and S-201012.25) include subsequently-revised calendar text as required.]

# Mathematical, Computer, <u>and Physical, and Molecular</u> Sciences (MSc Program)

Chair of the Mathematical, Computer, and Physical, and Molecular-Sciences Graduate Committee: Dr. Margot Mandy

#### **Biochemistry**

Chow H. Lee, Associate Professor, and National Cancer Institute of Canada Research Scientist Geoffrey Payne, Associate Professor Stephen Rader, Associate Professor Kerry Reimer, Associate Professor Andrea Gorrell, Assistant Professor Sarah Gray, Assistant Professor Martha Stark, Adjunct Professor

#### Chemistry

Joselito M. Arocena, Professor, and Canada Research Chair, Soil and Environmental Sciences Ron Thring, Professor Erik Jensen, Associate Professor Chow H. Lee, Associate Professor, and National Cancer Institute of Canada Research Scientist Jianbing Li, Associate Professor Margot Mandy, Associate Professor Guy Plourde, Associate Professor Stephen Rader, Associate Professor Kerry Reimer, Associate Professor Todd Whitcombe, Associate Professor Andrea Gorrell, Assistant Professor Martha Stark, Adjunct Professor

#### **Computer Science**

Liang Chen, Professor Waqar Haque, Professor Lee Keener, Professor Alex Aravind, Associate Professor Charles Brown, Associate Professor Jernej Polajnar, Associate Professor Roger Wheate, Associate Professor David Casperson, Assistant Professor Desanka Polajnar, Adjunct Professor

#### **Mathematics**

Lee Keener, Professor Iliya Bluskov, Professor Jennifer Hyndman, Professor Pranesh Kumar, Professor Samuel Walters, Professor Kevin Keen, Associate Professor David Casperson, Assistant Professor Patrick Montgomery, Adjunct Professor

#### Physics

Elie Korkmaz, Professor Mark Shegelski, Professor Ian Hartley, Associate Professor Erik Jensen, Associate Professor Margot Mandy, Associate Professor Matthew Reid, Assistant Professor Patrick Montgomery, Adjunct Professor

#### Website: www.unbc.ca/mcps-www.unbc.ca/mcpm

Mathematical, Computer, and Physical, and Molecular Sciences (MCPMS) is one stream of the Master of Science degree in the College of Science and Management. Thesis and project options are available. The thesis option has, as a substantial component, the completion of an original research program, culminating in the preparation of a thesis, and prepares graduates for careers in research or for further academic study. The project option provides training across disciplines particularly suitable to individuals with more defined career objectives, as well as provides a mechanism for non-traditional students (e.g., working students, teachers, and professionals) to upgrade their skills. Students studying within the MCPMS stream will, upon successful completion of the degree requirements outlined herein, obtain a MSc with one or any combination of the following study areas noted parenthetically on their transcript: Mathematics, Biochemistry, Computer Science, Chemistry, and Physics or any combination thereof.

All students must participate in a Graduate Seminar course (one of MCP<u>S</u>M-704-1.5, <u>BCMB 704-1.5</u>, NRES 704-1.5, CPSC 704-1.5, MATH 704-1.5, or CHEM 714-1.5) for at least two semesters during their course of studies. <u>Normally, students in the study area of Computer Science or a combination of study areas including Computer Science are expected to take CPSC 706-3.</u> Normally, students in the study area of Physics or a combination of study areas including of study areas including Physics are expected to take PHYS 710-3.

#### **Thesis Option**

The Master of Science thesis option is designed for candidates who wish to develop career interests related to scientific research or who intend to pursue further academic research degrees. The degree is expected to attract students from traditional science disciplines such as physics, chemistry, mathematics, and computer science. MSc students within the MCP<del>MS</del> stream are required to complete 3 credit <del>hours</del> of Graduate Seminar, a minimum of 12 credit hours of approved electives, and a 12 credit hour thesis (MCP<u>S</u><del>M</del> 790-12). It is expected that the electives will consist of scientifically-oriented courses and that the thesis will involve an independent investigation resulting in a scientific contribution.

The 12 elective credit hours must be graduate-level study (i.e., at or above the 600 level) selected from the science courses available at UNBC. A maximum of 6 credit-hours from independent studies can be counted towards the elective requirement. Specific details of course work are determined by the research area undertaken by the student. The supervisory committee ensures the appropriate selection of elective courses, and may require a student to

complete more than 12 elective credit hours if, for example, weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

Related to the MSc thesis (MCP<u>S</u>M-790-12), students are required to (a) make an oral presentation of the thesis proposal to the supervisory committee<sub> $\tau$ </sub>; (b) write an original thesis based on the research completed (in accordance with established UNBC guidelines)– $\tau$ ; (c) give a public lecture on the completed thesis $\tau$ ; and (d) present an oral defense of the thesis to the examining committee. All course requirements must have been satisfied prior to the oral defense.

#### Summary of Thesis Option

Graduate Seminar 3 credit-hours Elective Courses 12 credit-hours MSc Thesis 12 credit-hours Total Required 27 credit-hours

#### **Project Option**

The Master of Science project option is designed for candidates who wish to upgrade their skills, or who are constrained in their ability to undertake a traditional research thesis. MSc students within the MCPMS stream are required to complete 3 credit hours of Graduate Seminar, a minimum of 18 credit hours of approved electives, and a 6 credit-hour project. Given the course-intensive nature of this option, MSc projects are limited, subject to sufficient teaching resources and a critical mass of faculty within an area of defined specialization. It is expected that the electives will consist of <u>scientifically-oriented scientifically oriented</u> courses, and that the project will involve an independent investigation resulting in a scientific contribution, although this contribution need not include original research. Because of the high weighting of course offerings for this option, it is restricted to designated specializations that have been decided upon within each program area. Designation of a specialization implies that sufficient resources are available to ensure that required courses within the specialization can be offered to ensure completion of the requirements for the degree.

The 18 elective credit hours must be graduate level study (i.e., at or above the 600 level) selected from the science courses available within the designated specialization. A maximum of 6 credit hours from independent studies can be counted towards the elective requirement. Normally, students in the study area of Computer Science or a combination of study areas including Computer Science are expected to take CPSC 706-3. Normally, students in the study area of Physics or a combination of study areas including Physics are expected to take PHYS 710-3. Specific details of course work are determined by the nature of the project undertaken by each student. The supervisory committee ensures the appropriate selection of elective courses, and may require a student to complete more than 18 credit hours if weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

In order to successfully to complete a MSc project, a student is required to (a) make a presentation of the project proposal to the supervisory committee, (b) write a project report, (c) give a public lecture on the completed project, and (d) pass an evaluation of the project and report with the examining committee. All core and elective course requirements must have been satisfied prior to the oral presentation of the project.

#### **Summary of Project Option**

Graduate Seminar 3 credit-hours Elective Courses 18 credit-hours MSc Project 6 credit-hours Total Required 27 credit-hours

#### **Recommended Progression**

The normal time for completion of the MSc is two academic years. While this is the recommended time line, it may be adjusted at the discretion of the supervisory committee to suit a particular student's research and program needs.

The Graduate Seminar courses (one or more of MCP<u>S</u>M 704-1.5, NRES 704-1.5, <u>BCMB 704-1.5</u>, CPSC 704-1.5, MATH 704-1.5, CHEM 714-1.5) are offered during all September and January Semesters. Students are expected to enroll in a seminar course at least two times during their degree program.

Electives may be taken at any time during Years I and II. The sequencing of electives is determined by the student in discussion with the supervisory committee. Over the September and January Semesters of Year I, the student, under the direction of the supervisory committee, develops a thesis or project proposal. By the end of the second semester, the student should have successfully defended their proposal to the supervisory committee. This allows the student to undertake the collection of data during the Summer of Year I. It is expected that the student will have successfully defended the project by the end of Year II.

### Admission, Regulations and Committee Structures

#### **Admission Requirements**

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, acceptance to the MSc program <u>will be</u> is contingent upon the prospective student finding a member of the faculty to serve as her/his supervisor. Applicants must also provide a completed Teaching Assistantship Application and a completed Funding Worksheet. Both forms are included with the application material for this program. Normally, at least two of the three letters of recommendation, exclusive of any letter provided by an intended supervisor, must be from individuals who are able to comment on the applicant's academic and research potential. Application deadlines are found in this calendar under "Semester Dates" or online at: www.unbc.ca/calendar/graduate, also under "Semester Dates." The Mathematical, Computer, and Physical, and Molecular. Sciences MSc Program accepts students for the September and January Semesters. For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at www. unbc.ca/graduateprograms.

#### **Transfer Students**

On the recommendation of the program concerned, the Associate Dean of Graduate Programs may accept courses taken at other institutions for credit toward a UNBC graduate program. At the time of application, it is recommended that applicants clearly state in a letter the intent to transfer courses and identify the courses to be considered for possible transfer.

#### **Normal Time Required for Completion**

Normally, the degree should be completed in two years or less. Students may take longer to complete the degree depending on their personal circumstances and the nature of their research or Project involvement.

#### **Committee Structure**

Students will be advised by a supervisory committee consisting of at least three members, including the academic supervisor who will normally serve as the chair of the committee. At least one of the committee members must be from outside of the student's program. The committee will be struck during the student's first term of study.

#### <u>S-201012.24</u> Revision to Calendar Description — Graduate Program in Mathematical, Computer, and Physical Sciences

#### Casperson / Donker

That, on the recommendation of the Senate Committee on Research and Graduate Studies, the changes to the calendar description for the Graduate Program in Mathematical, Computer, and Physical Sciences, beginning on page 78 of the 2010/2011 graduate calendar, be approved as proposed. Effective date: September 2011 CARRIED.

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

### Mathematical, Computer, and Physical Sciences (MSc Program)

Chair of the Mathematical, Computer, and Physical Sciences Graduate Committee: Dr. Margot Mandy

#### Chemistry

Joselito M. Arocena, Professor, and: Canada Research Chair, Soil and Environmental Sciences Ron Thring, Professor Erik Jensen, Associate Professor Chow H. Lee, Associate Professor, and: National Cancer Institute of Canada Research Scientist Jianbing Li, Associate Professor Margot Mandy, Associate Professor Guy Plourde, Associate Professor Stephen Rader, Associate Professor Kerry Reimer, Associate Professor Todd Whitcombe, Associate Professor Andrea Gorrell, Assistant Professor

#### **Computer Science**

Liang Chen, Professor Waqar Haque, Professor Lee Keener, Professor Alex Aravind, Associate Professor Charles Brown, Associate Professor Jernej Polajnar, Associate Professor Roger Wheate, Associate Professor Geography) Saif Zahir, Associate Professor David Casperson, Assistant Professor Desanka Polajnar, Adjunct Professor

#### **Mathematics**

Lee Keener, Professor Iliya Bluskov, Professor Jennifer Hyndman, Professor Pranesh Kumar, Professor Samuel Walters, Professor Kevin Keen, Associate Professor David Casperson, Assistant Professor Patrick Montgomery, Adjunct Professor

#### Physics

Elie Korkmaz, Professor Mark Shegelski, Professor Ian Hartley, Associate Professor Erik Jensen, Associate Professor Margot Mandy, Associate Professor Matthew Reid, Assistant Professor Patrick Montgomery, Adjunct Professor

Website: <u>www.unbc.ca/mcps</u>

Mathematical, Computer, and Physical Sciences (MCPS) is one stream of the Master of Science degree in the College of Science and Management. Thesis and project options are available. The thesis option has, as a substantial component, the completion of an original research program, culminating in the preparation of a thesis, and prepares graduates for careers in research or for further academic study. The project option provides training across disciplines particularly suitable to individuals with more defined career objectives, as well as provides a mechanism for non-traditional students (e.g., working students, teachers, and professionals) to upgrade their skills. Students studying within the MCPS stream will, upon successful completion of the degree requirements outlined herein, obtain an MSc with one or any combination of the following study areas noted parenthetically on their transcript: Mathematics, Computer Science, Chemistry, and Physics or any combination thereof.

All students must participate in a Graduate Seminar course (one of MCPS\_704-1.5, <u>BCMB 704-1.5</u>, NRES 704-1.5, CPSC 704-1.5, MATH 704-1.5, or CHEM 714-1.5) for at least two semesters during their course of studies. <del>Normally, students in the study area of Computer Science or a combination of study areas including Computer Science are expected to take CPSC 706-3.</del> Normally, students in the study area of Physics or a combination of study areas including computer science are including Physics are expected to take PHYS 710-3.

#### **Thesis Option**

The Master of Science thesis option is designed for candidates who wish to develop career interests related to scientific research or who intend to pursue further academic research degrees. The degree is expected to attract students from traditional science disciplines such as physics, chemistry, mathematics, and computer science. MSc students within the MCPS stream are required to complete 3 credit hours of Graduate Seminar, a minimum of 12 credit hours of approved electives, and a 12 credit-hour thesis (MCPS 790-12). It is expected that the electives will consist of scientifically-oriented scientifically oriented courses and that the thesis will involve an independent investigation resulting in a scientific contribution.

The 12 elective credit hours must be graduate-level study (i.e., at or above the 600 level) selected from the science courses available at UNBC. A maximum of 6 credit hours from independent studies can be counted towards the elective requirement. Specific details of course work are determined by the research area undertaken by the student.

The supervisory committee ensures the appropriate selection of elective courses, and may require a student to complete more than 12 elective credit <u>hours</u> if, for example, weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

Related to the MSc thesis (MCPS\_790-12), students are required to (a) make an oral presentation of the thesis proposal to the supervisory committee, (b) write an original thesis based on the research completed (in accordance with established UNBC guidelines), (c) give a public lecture on the completed thesis, and (d) present an oral defense of the thesis to the examining committee. All course requirements must have been satisfied prior to the oral defense.

#### Summary of Thesis Option

Graduate Seminar 3 credit <u>hours</u> Elective Courses 12 credit <u>hours</u> MSc Thesis 12 credit <u>hours</u> Total Required 27 credit <u>hours</u>

#### **Project Option**

The Master of Science project option is designed for candidates who wish to upgrade their skills, or who are constrained in their ability to undertake a traditional research thesis. MSc students within the MCPS stream are required to complete 3 credit hours of Graduate Seminar, a minimum of 18 credit hours of approved electives, and a 6 credit-hour project. Given the course-intensive nature of this option, MSc projects are limited, subject to sufficient teaching resources and a critical mass of faculty within an area of defined specialization. It is expected that the electives will consist of scientifically-oriented scientifically oriented courses, and that the project will involve an independent investigation resulting in a scientific contribution, although this contribution need not include original research. Because of the high weighting of course offerings for this option, it is restricted to designated specializations that have been decided upon within each program area. Designation of a specialization implies that sufficient resources are available to ensure that required courses within the specialization can be offered to ensure completion of fulfill the requirements for the degree.

The 18 elective credit hours must be graduate-level study (i.e., at or above the 600 level) selected from the science courses available within the designated specialization. A maximum of 6 credit hours from independent studies can be counted towards the elective requirement. Normally, students in the study area of Computer Science or a combination of study areas including Computer Science are expected to take CPSC 706-3. Normally, students in the study area of Physics or a combination of study areas including Physics are expected to take PHYS 710-3. Specific details of course work are determined by the nature of the project undertaken by each student. The supervisory committee ensures the appropriate selection of elective courses, and may require a student to complete more than 18 credit hours if weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

In order to successfully complete an MSc project successfully, a student is required to (a) make a presentation of the project proposal to the supervisory committee, (b) write a project report, (c) give a public lecture on the completed project, and (d) pass an evaluation of the project and report with the examining committee. All core and elective course requirements must have been satisfied prior to the oral presentation of the project.

#### **Summary of Project Option**

Graduate Seminar 3 credit <u>hours</u> Elective Courses 18 credit <u>hours</u> MSc Project 6 credit <u>hours</u> Total Required 27 credit <u>hours</u>

#### **Recommended Progression**

The normal time for completion of the MSc is two academic years. While this is the recommended time line, it may be adjusted at the discretion of the supervisory committee to suit a particular student's research and program needs.

The Graduate Seminar courses (one or more of MCPS 704-1.5, NRES 704-1.5, <u>BCMB 704-1.5</u>, CPSC 704-1.5, MATH 704-1.5, CHEM 714-1.5) are offered during all September and January Semesters. Students are expected to enroll in a seminar course at least two times during their degree program.

Electives may be taken at any time during Years I and II. The sequencing of electives is determined by the student in discussion with the supervisory committee. Over the September and January Semesters of Year I, the student, under the direction of the supervisory committee, develops a thesis or project proposal. By the end of the second semester, the student should have successfully defended their proposal to the supervisory committee. This allows the student to undertake the collection of data during the Summer of Year I. It is expected that the student will have successfully defended the project by the end of Year II.

### Admission, Regulations and Committee Structures

#### Admission Requirements

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, acceptance to the MSc program will be contingent upon the prospective student finding a member of the faculty to serve as her/his supervisor. Applicants must also provide a completed Teaching Assistantship Application and a completed Funding Worksheet. Both forms are included with the application material for this program. Normally, at least two of the three letters of recommendation, exclusive of any letter provided by an intended supervisor, must be from individuals who are able to comment on the applicant's academic and research potential. Application deadlines are found in this calendar under "Semester Dates" or online at: www.unbc.ca/calendar/graduate, also under "Semesters. For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at www.unbc.ca/graduateprograms.

#### Transfer Students

On the recommendation of the program concerned, the Associate Dean of Graduate Programs may accept courses taken at other institutions for credit toward a UNBC graduate program. At the time of application, it is recommended that applicants clearly state in a letter the intent to transfer courses and identify the courses to be considered for possible transfer.

#### Normal Time Required for Completion

Normally, the degree should be completed in two years or less. Students may take longer to complete the degree depending on their personal circumstances and the nature of their research or Project involvement.

#### **Committee Structure**

Students will be are advised by a supervisory committee consisting of at least three members, including the academic supervisor who will normally serve as the chair of the committee. At least one of the committee members must be from outside of the student's program. The committee will be struck during the student's first term of study.

#### S-201012.25

### Revision to Calendar Description — Graduate Program in Mathematical, Computer, and Physical Sciences

#### Casperson / Donker

That, on the recommendation of the Senate Committee on Research and Graduate Studies, the changes to the calendar description for the Graduate Program in Mathematical, Computer, and Physical Sciences, beginning on page 78 of the 2010/2011 graduate calendar, be approved as proposed. Effective date: Upon approval by Degree Quality Assessment Board CARRIED.

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

[Please note that changes taking effect in September 2011 are italicized. These changes have been addressed by an earlier motion.]

# Mathematical, Computer, and Physical, and Molecular Sciences (MSc Program)

Chair of the Mathematical, Computer, and Physical, and Molecular Sciences Graduate Committee: Dr. Margot Mandy

#### **Biochemistry**

Chow H. Lee, Associate Professor, and National Cancer Institute of Canada Research Scientist Geoffrey Payne, Associate Professor Stephen Rader, Associate Professor Kerry Reimer, Associate Professor Andrea Gorrell, Assistant Professor Sarah Gray, Assistant Professor Martha Stark, Adjunct Professor

#### Chemistry

Joselito M. Arocena, Professor<del>, and;</del> Canada Research Chair, Soil and Environmental Sciences Ron Thring, Professor Erik Jensen, Associate Professor Chow H. Lee, Associate Professor<del>, and;</del> National Cancer Institute of Canada Research Scientist Jianbing Li, Associate Professor Margot Mandy, Associate Professor Guy Plourde, Associate Professor Stephen Rader, Associate Professor Kerry Reimer, Associate Professor Todd Whitcombe, Associate Professor Andrea Gorrell, Assistant Professor Martha Stark, Adjunct Professor

#### **Computer Science**

Liang Chen, Professor Waqar Haque, Professor Lee Keener, Professor Alex Aravind, Associate Professor Charles Brown, Associate Professor Jernej Polajnar, Associate Professor Roger Wheate, Associate Professor Casperson, Assistant Professor David Casperson, Assistant Professor Desanka Polajnar, Adjunct Professor

#### **Mathematics**

Lee Keener, Professor Iliya Bluskov, Professor Jennifer Hyndman, Professor Pranesh Kumar, Professor Samuel Walters, Professor Kevin Keen, Associate Professor David Casperson, Assistant Professor Patrick Montgomery, Adjunct Professor

#### Physics

Elie Korkmaz, Professor Mark Shegelski, Professor Ian Hartley, Associate Professor Erik Jensen, Associate Professor Margot Mandy, Associate Professor Matthew Reid, Assistant Professor Patrick Montgomery, Adjunct Professor

Website: www.unbc.ca/mcps-www.unbc.ca/mcpm

Mathematical, Computer, and Physical, and Molecular Sciences (MCPMS) is one stream of the Master of Science degree in the College of Science and Management. Thesis and project options are available. The thesis option has, as a substantial component, the completion of an original research program, culminating in the preparation of a thesis, and prepares graduates for careers in research or for further academic study. The project option provides training across disciplines particularly suitable to individuals with more defined career objectives, as well as provides a mechanism for non-traditional students (e.g., working students, teachers, and professionals) to upgrade their skills. Students studying within the MCPMS stream will, upon successful completion of the degree requirements outlined herein, obtain an MSc with one or any combination of the following study areas noted parenthetically on their transcript: Mathematics, Biochemistry, Computer Science, Chemistry, and Physics or any combination thereof.

All students must participate in a Graduate Seminar course (one of MCPSM 704-1.5, <u>BCMB 704-1.5</u>, NRES 704-1.5, CPSC 704-1.5, MATH 704-1.5, or CHEM 714-1.5) for at least two semesters during their course of studies. *Normally, students in the study area of Computer Science or a combination of study areas including Computer Science are expected to take CPSC 706-3*. Normally, students in the study area of Physics or a combination of study areas including the study areas including Physics are expected to take PHYS 710-3.

#### **Thesis Option**

The Master of Science thesis option is designed for candidates who wish to develop career interests related to scientific research or who intend to pursue further academic research degrees. The degree is expected to attract students from traditional science disciplines such as physics, chemistry, mathematics, and computer science. MSc students within the MCP<u>M</u>S stream are required to complete 3 credit <u>hours</u> of Graduate Seminar, a minimum of 12 credit hours of approved electives, and a 12 credit\_hour thesis (MCP<u>SM</u> 790-12). It is expected that the electives will consist of <u>scientifically-oriented</u> <u>scientifically oriented</u> courses and that the thesis will involve an independent investigation resulting in a scientific contribution.

The 12 elective credit hours must be graduate-level study (i.e., at or above the 600 level) selected from the science courses available at UNBC. A maximum of 6 credit hours from independent studies can be counted towards the elective requirement. Specific details of course work are determined by the research area undertaken by the student. The supervisory committee ensures the appropriate selection of elective courses, and may require a student to complete more than 12 elective credit hours if, for example, weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

Related to the MSc thesis (MCPSM\_790-12), students are required to (a) make an oral presentation of the thesis proposal to the supervisory committee, (b) write an original thesis based on the research completed (in accordance with established UNBC guidelines), (c) give a public lecture on the completed thesis, and (d) present an oral defense of the thesis to the examining committee. All course requirements must have been satisfied prior to the oral defense.

#### **Summary of Thesis Option**

Graduate Seminar 3 credit <u>hours</u> Elective Courses 12 credit <u>hours</u> MSc Thesis 12 credit <u>hours</u> Total Required 27 credit <u>hours</u>

#### **Project Option**

The Master of Science project option is designed for candidates who wish to upgrade their skills, or who are constrained in their ability to undertake a traditional research thesis. MSc students within the MCPMS stream are required to complete 3 credit hours of Graduate Seminar, a minimum of 18 credit hours of approved electives, and a 6 credit-hour project. Given the course-intensive nature of this option, MSc projects are limited, subject to sufficient teaching resources and a critical mass of faculty within an area of defined specialization. It is expected that the electives will consist of scientifically-oriented scientifically oriented courses, and that the project will involve an independent investigation resulting in a scientific contribution, although this contribution need not include original research. Because of the high weighting of course offerings for this option, it is restricted to designated specializations that have been decided upon within each program area. Designation of a specialization implies that sufficient resources are available to ensure that required courses within the specialization can be offered to ensure completion of fulfill the requirements for the degree.

The 18 elective credit hours must be graduate-level study (i.e., at or above the 600 level) selected from the science courses available within the designated specialization. A maximum of 6 credit hours from independent studies can be counted towards the elective requirement. *Normally, students in the study area of Computer Science or a combination of study areas including Computer Science are expected to take CPSC 706-3.* Normally, students in the study area of Physics or a combination of study areas including Physics are expected to take PHYS 710-3. Specific details of course work are determined by the nature of the project undertaken by each student. The supervisory committee ensures the appropriate selection of elective courses, and may require a student to complete more than 18 credit hours if weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

In order to successfully complete an MSc project successfully, a student is required to (a) make a presentation of the project proposal to the supervisory committee, (b) write a project report, (c) give a public lecture on the completed project, and (d) pass an evaluation of the project and report with the examining committee. All core and elective course requirements must have been satisfied prior to the oral presentation of the project.

#### **Summary of Project Option**

Graduate Seminar 3 credit <u>hours</u> Elective Courses 18 credit <u>hours</u> MSc Project 6 credit hours

#### Recommended Progression

The normal time for completion of the MSc is two academic years. While this is the recommended time line, it may be adjusted at the discretion of the supervisory committee to suit a particular student's research and program needs.

The Graduate Seminar courses (one or more of MCP<u>SM</u> 704-1.5, NRES 704-1.5, <u>BCMB 704-1.5</u>, CPSC 704-1.5, MATH 704-1.5, CHEM 714-1.5) are offered during all September and January Semesters. Students are expected to enroll in a seminar course at least two times during their degree program.

Electives may be taken at any time during Years I and II. The sequencing of electives is determined by the student in discussion with the supervisory committee. Over the September and January Semesters of Year I, the student, under the direction of the supervisory committee, develops a thesis or project proposal. By the end of the second semester, the student should have successfully defended their proposal to the supervisory committee. This allows the student to undertake the collection of data during the Summer of Year I. It is expected that the student will have successfully defended the project by the end of Year II.

#### Admission, Regulations and Committee Structures

#### Admission Requirements

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, acceptance to the MSc program will be contingent upon the prospective student finding a member of the faculty to serve as her/his supervisor. Applicants must also provide a completed Teaching Assistantship Application and a completed Funding Worksheet. Both forms are included with the application material for this program. Normally, at least two of the three letters of recommendation, exclusive of any letter provided by an intended supervisor, must be from individuals who are able to comment on the applicant's academic and research potential. Application deadlines are found in this calendar under "Semester Dates" or online at: www.unbc.ca/calendar/graduate, also under "Semester Dates." The Mathematical, Computer, and Physical, and Molecular Sciences MSc Program accepts students for the September and January Semesters. For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at www.unbc.ca/graduateprograms.

#### **Transfer Students**

On the recommendation of the program concerned, the <u>Associate</u> Dean of Graduate Programs may accept courses taken at other institutions for credit toward a UNBC graduate program. <u>At the time of application, it is recommended</u> <u>that applicants clearly state in a letter the intent to transfer courses and identify the courses to be considered for possible transfer.</u>

#### Normal Time Required for Completion

Normally, the degree should be completed in two years or less. Students may take longer to complete the degree depending on their personal circumstances and the nature of their research or Project involvement.

#### **Committee Structure**

Students will be are advised by a supervisory committee consisting of at least three members, including the academic supervisor who will normally serve as the chair of the committee. At least one of the committee members must be from outside of the student's program. The committee will be struck during the student's first term of study.

#### S-201012.26

#### Change of Effective Date of SCRGS Motions

Casperson / Donker

That, on the recommendation of the Senate Committee on Research and Graduate Studies, the effective date of motions SCRGS201008.26, SCRGS201008.27, SCRGS201008.28, SCRGS201008.29, SCRGS201008.30, and SCRGS201008.31 reported to Senate for information on 25 August 2010 be changed from "September 2011" to "upon approval of the Degree Quality Assessment Board." Effective date: Upon approval by Senate CARRIED.

#### S-201012.27

#### **Change in Designation of the English Program to the Department of English** Beeler / Donker That, on the recommendation of the Senate Committee on Research and Graduate Studies, the change in designation of the English Program to the Department of English on pages 70, 71, and 110 of the 2010/2011 Graduate calendar, be approved as proposed. Effective date: January 2011 CARRIED.

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

(page 70)

English (MA Program)

Stan Beeler, Associate Professor, and Program Chair Dee Horne, Professor Karin Beeler, Associate Professor: Department Chair Robert Budde, Associate Professor Lisa Dickson, Associate Professor Kristen Guest, Associate Professor Kevin Hutchings, Associate Professor, and ; Canada Research Chair in Literature, Culture and Environmental Studies , Romantic Studies: Environment, Culture and Representation Maryna Romanets, Associate Professor Blanca Schorcht, Associate Professor, and Regional Chair, South-Central Region Linda MacKinley-Hay, Assistant Professor

Website: http://www.unbc.ca/english

Literary representations both reflect and help to create our views of the world, including our social theories and practices; thus, the study of literature can provide students with insights concerning past and present concepts of personal and social identity, cultural traditions and beliefs, and interpersonal and cross-cultural relationships. Since the time of Aristotle, moreover, literary commentators have analyzed "setting" as an important formal aspect of literary writing; literary study can therefore help us to investigate, and perhaps to reconsider, our relationships to both our human and non-human environments. In today's world, where efforts to resolve intercultural conflicts and environmental problems have taken on a profound sense of urgency, literary study provides a crucial forum for intellectual and ethical debate leading to the revision of cultural practice.

(page 71)

#### Requirements

The course of study shall be composed of a minimum total of 27 credit hours of work. First, students will be required to complete  $\frac{5}{100}$  courses totaling 15 credit hours, including ENGL 690-3, Bibliography, the mandatory course in research methodologies; ENGL 700-3, the mandatory course in Literature, Culture and Place; and  $\frac{3}{100}$  three elective courses. In the required courses, students have the opportunity to engage in close intellectual dialogue and debate with fellow graduate students and professors, thereby cultivating the productive collegial relationships crucial to the development of a dynamic graduate student culture. With the exception of ENGL 699-3 (Advanced Independent Study in Literature, which faculty members supervise on an individual basis), all courses are offered as seminar courses. The three elective courses conform to pedagogical models followed by all 600-level courses listed in the UNBC Graduate Calendar. Second, students will be required to produce both a detailed thesis proposal and bibliography at the beginning of their second year of study, and to defend, in a formal oral examination, a 12-credit 12 credit-hour thesis of approximately 100 pages in length.

Although UNBC does not offer degrees in Creative Writing, the English Program will offer a limited number of MA candidates the opportunity to complete a <del>12-credit</del> 12 credit-hour creative thesis in lieu of an academic thesis. Successful applicants who wish to pursue this option will be admitted on the same basis and will fulfill the same course and thesis requirements as other English MA candidates. Permission to undertake a creative thesis will be at the discretion of the program department, and will require that students submit proposals along with a substantial portfolio of previous creative work;, e.g., published writing, 8-10 pages of original poetry, 20-25 pages of prose (i.e., a short story or novel excerpt), a dramatic script or screenplay, or a combination of these genres. The proposal should outline the form, scope, and subject matter of the Creative Writing thesis. In addition, students must demonstrate some critical and theoretical awareness of the approach they plan to take for the creative thesis: and, for applicants admitted to the program, the finished thesis will include an introduction of no fewer than 15 pages delineating this critical and theoretical awareness. Because of the high standards expected for the creative project and the Program's Department's limited faculty resources in the area of creative writing, a limited number of students will be permitted to undertake this alternative. Students should therefore note that admission to the MA program in English does not guarantee permission to write a creative thesis.

**Required Courses** 

ENGL 690-3

Bibliography ENGL 700-3

Studies in Literature, Culture and Place

**Required Thesis** 

ENGL 799-12

MA Thesis

**Elective Courses** 

The supervisory committee ensures the appropriate selection of elective courses. All English graduate courses approved by Senate should be considered as potential electives.

• Have an average of at least 75% based on the following four courses: Principles of Math 12 or Pre-calculus 12, English 12 and two provincially examinable Science 12 courses. In addition, applicants must have successfully completed Chemistry 11 in order to meet course prerequisites in the Program. Physics 12 or an equivalent is strongly recommended, as it is a prerequisite for first-year Physics courses in the program. Students who are admitted without the Physics 12 prerequisite may be delayed in their studies as they may not be able to complete the first four semesters of the program in the normal two year time period. Meeting the minimum GPA does not guarantee admission. Under exceptional circumstances the prerequisites may be waived.

Other applicants must demonstrate that they possess qualifications at least equivalent to the BC and Yukon requirement.

Admission to the program is limited and is based on academic qualifications and available space. Priority admission will be given to students who meet admission criteria and apply by the deadline of March 1.

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

Admission Requirements

The main motion was also subsequently CARRIED.

Casperson / Binnema

That the effective date of Senate motion S-201012.28 be changed from September 2010 to January 2011.

CARRIED.

2011. Motion to change effective date:

It was suggested that the effective date of this motion be changed from September 2010 to January

That, on the recommendation of the Senate Committee on Admissions and Degrees, the change(s) to the Admission Requirements for Environmental Engineering, on page 111 of the 2010/2011 undergraduate

Senate Committee on Admissions and Degrees

Casperson / Binnema

#### S-201012.28

calendar, be approved as proposed. Effective date: January 2011

within square brackets]):

## Change to Admission Requirements for Environmental Engineering

Applicants from BC and Yukon secondary schools must: Meet UNBC admission requirements, and

"For Approval" Items:

#### Students wishing to take any of the graduate English (600) level) 600-level graduate English courses as part of an interdisciplinary or other MA program should consult the Department of English Program Chair.

Vacant

English

8.3

#### SCSB20101124.05

New Terms and Conditions — Northern BC Mining Research Award

That the new Terms and Conditions for the Northern BC Mining Research Award be approved. Effective Date: 2011/2012 Academic Year CARRIED (consent agenda).

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

Award Category: In-course and Graduate

Award Name: Northern BC Mining Research Award

**Calendar Description/Intent:** The Minerals North Host Committee provides this gift as a legacy of the 2010 Minerals North Conference that was held in Prince George in order to benefit students conducting research related to the mining industry in northern BC.

Donor: Minerals North Host Committee/Initiatives Prince George

Value: \$5,000

Number: One

Placement in which Calendar: Undergraduate and Graduate

Award Type: Award

**Eligibility:** Available to a full or part time graduate or upper division undergraduate student conducting research projects on issues of particular interest to mineral exploration or the mining industry. First preference will be given to a graduate student.

Criteria: Academic excellence.

**Note:** Applicants must obtain an industry partner that will provide a minimum of \$5,000 to support each award.

**Application Instructions:** Fill out all sections of the Awards Application form and attach your Resume, name of industry partner and area of research.

Effective Date: Established 2010

**Recipient Selection:** Senate Committee on Scholarships and Bursaries on recommendation by the UNBC Awards Office.

#### SCSB20101124.08

### Approval of Policy and Procedures and New Terms and Conditions Template — UNBC Northern Medical Program Awards

That the submitted Proposal for Policy and Procedures for UNBC Northern Medical Program Awards and attached draft template of NMP Terms & Conditions be approved. Effective Date: 2010-2011 Academic Year

CARRIED (consent agenda).

#### 8.5 Steering Committee of Senate

#### <u>"For Approval" Items:</u>

#### S-201012.29

### Senate Handbook Revision — Terms of Reference for Steering Committee of Senate Ryan / Donker

That, on the recommendation of the Steering Committee of Senate, the revisions to the Senate Handbook, to add the Provost to the membership of the Steering Committee of Senate, be approved as proposed.

Effective date: Immediately upon approval by Senate CARRIED.

#### S-201012.30

#### Senate Handbook Revision — Senate Quorum Requirements

Beeler / McKenzie That, on the recommendation of the Steering Committee of Senate, the revisions to the Senate Handbook, to revise Senate quorum requirements, be approved as proposed. Effective date: Immediately upon approval by Senate

The matter of student quorum was discussed, and it was recommended that the number required for quorum be changed to 4 instead of 2.

#### Motion:

Beeler / McKenzie That the quorum requirement for student Senators be changed to 4. CARRIED.

#### S-201012.31

#### Revision to Senate Handbook — SCAPP Art Acquisition Subcommittee

Casperson / McKenzie That, on the recommendation of the Steering Committee of Senate, the proposed revisions to the SCAPP Art Acquisition Subcommittee terms of reference be approved as proposed. Effective date: Immediately upon approval by Senate CARRIED.

#### 9.0 Other Business

- **9.1** Report of the Registrar (*no material*)
- **9.2** Presentation Library Strategic Plan

Ms. Ashoughian presented an overview of the Library Strategic Plan (presentation attached to these minutes as Appendix I). She noted that UNBC needs a northern research library in support of our mandate of being research-intensive, that the library strives to marry research with teaching and learning, that the north is important and the Library supports different ways of knowing, and that the Library wants to engage and create community. Furthermore, Ms. Ashoughian suggested that research support equates with better access to resources and an open access environment. Many of the values associated with the Library Strategic Plan were derived from the University Plan, and the Plan was a result of much consultation. In addition, the "Priority Actions" identified in the Library Strategic Plan are linked with the University Plan and the Action Plans of the Vice President Research and the Provost, and the Library plays a significant role in this regard. Ms. Ashoughian discussed the function of the Library with regard to teaching and learning, the Northern perspective and diversity, and community.

#### Motion:

Casperson / McKenzie That the Senate meeting be extended beyond 4:30 p.m. CARRIED.

#### 10.0 Information

There were no items for information.

#### 11.0 <u>S-201012.32</u>

Move to In Camera Session Hoffman / Alec That the meeting move In Camera. CARRIED. DeGrace

Ashoughian

#### 12.0

S-201012.40 Adjournment Beeler / Annis That the Senate meeting be adjourned. CARRIED.

The meeting ended at 4:45 p.m.