

THE UNIVERSITY OF BRITISH COLUMBIA Vancouver Senate Secretariat Senate and Curriculum Services Enrolment Services 2016–1874 East Mall Vancouver, BC V6T 1Z1 www.senate.ubc.ca

# VANCOUVER SENATE

# **MINUTES OF JANUARY 17, 1996**

#### Attendance

Present: Dr. R. M. Will (Vice-Chair), Vice-President D. R. Birch, Mr. S. Arnold, Dr. D. R. Atkins, Mr. J. A. Banfield, Dr. J. D. Berger, Dean C. S. Binkley, Dr. A. E. Boardman, Mr. J. Boritz, Mr. P. T. Brady, Dr. D. M. Brunette, Ms. L. Chui, Dr. D. H. Cohen, Dr. M. G. R. Coope, Mr. D. Culhane, Ms. J. Dzerowicz, Dr. J. H. V. Gilbert, Mr. E. B. Goehring, Mr. H. D. Gray, Rev. J. Hanrahan, Dean M. J. Hollenberg, Dr. M. Isaacson, Dr. J. G. T. Kelsey, Mr. D. Khan, Dr. S. B. Knight, Ms. L. Lam, Mr. A. Lau, Mr. T. Lau, Dr. M. Levine, Mr. C. Lim, Professor P. T. K. Lin, Dr. S. C. Lindstrom, Mr. R. W. Lowe, Dr. D. M. Lyster, Dr. D. J. MacDougall, Dr. M. MacEntee, Dean M. P. Marchak, Dean B. C. McBride, Dean J. H. McNeill, Dean A. Meisen, Dr. M. D. Morrison, Dr. R. J. Patrick, Mr. R. L. de Pfyffer, Dr. W. J. Phillips, Mrs. M. Price, Dr. D. J. Randall, Professor R. S. Reid, Professor J. A. Rice, Dean J. F. Richards, Dr. H. B. Richer, Dr. R. A. Shearer, Dean N. Sheehan, Dr. A. J. Sinclair, Dr. C. E. Slonecker, Dean C. L. Smith, Ms. C. A. Soong, Dr. L. J. Stan, Dr. J. R. Thompson, Dr. S. Thorne, Dr. W. Uegama, Dr. J. Vanderstoep, Mr. D. R. Verma, Dr. E. W. Whittaker, Dr. D. Ll. Williams, Mr. E. C. H. Woo, Dean E. H. K. Yen.

**Regrets:** President D. W. Strangway, Chancellor R. H. Lee, Dr. A. P. Autor, Dr. S. Avramidis, Dr. J. Barman, Dr. D. G. A. Carter, Dr. T. S. Cook, Mr. D. G. Geros, Mr. I. Gill, Dean M. A. Goldberg, Dr. J. Gosline, Dean J. R. Grace, Dr. S. E. Grace, Professor V. J. Kirkness, Mr. S. Lohachitranont, Mr. W. B. McNulty, Mr. A. Pederson, Professor M. Quayle, Mr. D. Shu, Ms. L. M. Sparrow, Dr. W. C. Wright Jr.

#### Minutes of the previous meeting

Dr. Whittaker	That the minutes of the fourth regular meeting
Dr. Isaacson	<i>of Senate for the Session 1995-96, having been</i>
	circulated, be taken as read and adopted.

Carried.

#### **Business arising from the Minutes**

ELECTION OF MEMBERS OF CONVOCATION TO SENATE (P.11271)

As agreed at the previous meeting, the Alumni Association was asked to name a member of Convocation to fill the vacancy which occurred when only ten of the eleven positions were filled in the recent election of Convocation members to Senate. Senate was informed that Dr. Stanley B. Knight had been named by the Alumni Association to fill the vacant Convocation position on Senate.

# VACANCIES FOR MEMBERS OF SENATE ELECTED BY MEMBERS OF A FACULTY (P.11272)

Dean Richards, chair of the Agenda Committee, informed Senate that it had been brought to his attention that the Agenda Committee's proposed amendment to the motion passed at the December Senate meeting does not indicate that the procedure applies in cases where no nominations are received for Senate representatives from the individual Faculties.

As the existing procedure for filling Faculty vacancies on Senate stipulates:

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"That nomination and election shall be conducted in accordance with established Faculty procedure. Where such established procedures do not exist then nominations shall be called for either before or on the floor of a meeting of the Faculty concerned and voting shall be either by a show of hands or by balloting at the meeting."

Dean Richards recommended that this procedure also apply in cases where there are insufficient nominations in response to a call for nominations for two representatives from each Faculty to serve on the Senate.

Dean Richards Dr. Cohen That the existing procedure for filling Faculty vacancies on Senate be adopted in cases where there are insufficient nominations for Faculty representatives to serve on Senate.

Carried.

# ELECTION OF A MEMBER OF SENATE TO SERVE ON THE PRESIDENTIAL SELECTION COMMITTEE

The following recommendation from the Registrar concerning nominations for a member

of Senate to serve on the Presidential Selection Committee was circulated at the meeting:

There was only one nominee for the two positions on the Search Committee for the Selection of Presidential Candidates for members of the Senate elected by Senate (see minutes of October 18, 1995, page 11230). There is therefore one vacancy. I recommend that a new election be held to fill this vacancy, with the following timelines:

Call for nominations distributed to members of Senate on Wednesday, January 17, 1996 or mailed Thursday, January 18, 1996

Nomination close Friday, January 26, 1996

Election material prepared and mailed as soon as possible thereafter

Ballot closes Friday, February 9, 1996

Election results available Monday, February 12, 1996

This does not meet the Board of Governors' timeline of having the committee in place by January 31, 1996. However, in the circumstance I believe it is the appropriate course of action.

Dean Richards	۱	That a new election be held to elect a second
Dr. Slonecker	}	<i>member of Senate to serve on the Presidential Selection Committee.</i>

Carried.

# Chair's remarks and related questions

Dr. Will expressed the opinion that it was sad and unfortunate that a number of elections could not be completed because of a lack of nominations. He stressed the importance of keeping the Senate well provisioned with people who can make contributions and hoped that the situation would not be repeated in three years time.

Ms. Dzerowicz noted that the deadline date for nominations for Senate representatives to serve on the Presidential Selection Committee was December 29 and suggested that the lack of nominations could have been due to the fact that many people are away during the Christmas break.

#### **Reports of Committees of Senate**

#### CONTINUING STUDIES COMMITTEE

*Proposed revision to the policy on the establishment of Certificate Programs at UBC* Dr. Vanderstoep, chair of the committee, presented the following report which had been circulated:

#### Preamble

Continuing education at The University of B.C. is undertaken by Continuing Studies, and by several Faculties who oversee discipline-specific programs. It is the purpose of this document to amend and to amplify the definition of University Certificate Programs approved by the University Senate in 1977, and to parallel the amended policy for Diploma programs approved by Senate in March, 1994.

The 1977 policy was unclear about the role of Senate in the approval of Diploma and Certificate programs, and focused specifically on programs that consisted entirely of degree-credit courses. The amended policy for Diploma programs clarified that such programs would consist primarily of degree-credit courses and would require Senate approval. The revised policy for Certificate programs clarifies that these programs will consist primarily of non-degree-credit courses and approval will rest with the academic units and Faculties. This policy recognizes the unique nature of Certificate programs as vehicles for offering programs consisting primarily of non-degree-credit courses in areas of expertise not represented in UBC's degree-credit offerings. By limiting approval to the departmental or Faculty level, the revised policy also responds to the need for a high level of market-place responsiveness and flexibility in the development of vocationally-oriented programs.

It is understood that both Faculties and Continuing Studies are mandated to develop and offer Certificate programs; the degree to which the units collaborate is subject to mutual agreement. We ask the Senate to approve the policy revision, subject to a review process to be set five years after the date of approval.

In summary, the new policy differs from the 1977 document in two respects:

- 1. Certificate programs may now consist of university non-degree credit (certificate-credit) courses. This change is based upon the rationale that Continuing Studies and academic units are capable of developing academically rigorous certificate-credit courses offered in a format compatible with the needs of adult learners and employers.
- 2. Each program will be reported to the Senate Continuing Education Committee and Senate through the regular reports of Continuing Studies. However, Senate will not be involved in the formal approval of Certificate programs. To ensure that academic standards and integrity are consistent with the University overall, all programs must be approved by the academic units involved in their development and offering, as well as by the Associate Vice-President of Continuing Studies.

# Guidelines for the Establishment of Certificate Programs (Amendments to 1977 Guidelines for the Establishment of Diploma and Certificate Programs)

# I. Definition of a Certificate Program

- 1) A certificate program should normally consist of specialized, non-degree credit (certificate-credit) courses offered at a university level. It may also draw from regular University degree-credit courses taken specifically for a certificate program. Student assessment in certificate-credit courses should be consistent with University standards.
- 2) The program of study should be equivalent to a minimum of one-half, and a maximum of one-full year of university study.
- 3) Minimum admission requirements should be secondary school graduation with some exceptions made for mature students. Normal admission requirements may require some post-secondary education or professional work experience.

# II. Criteria for the Establishment of Certificate Programs

- 1) A program should be initiated only if the subject matter is appropriate to university-level teaching and research. Programs may be established collaboratively among academic units and Continuing Studies, and may include collaborative partners external to the University.
- 2) A program should have clearly defined educational objectives and may be oriented toward a career or professional standing; it should not be a set of courses to screen candidates for a graduate degree.
- 3) A program should be developed and maintained under the guidance of an advisory committee consisting of representatives (where appropriate) from University departments and Faculties, Continuing Studies, and outside professional bodies.
- 4) Program development including curriculum, evaluative procedures, admission procedures and support services (such as appropriate library collections and student services) will be undertaken by the advisory committee, subject to approval by appropriate academic units.

# **III. Program Approval Process**

- 1) The proposed certificate program is approved in principle by Deans or Unit Heads of those Faculties or departments involved in the planning process, and designated members of the respective Faculties or departments are assigned to the program advisory committee.
- 2) Upon approval by the advisory committee, the program proposal is forwarded to appropriate Deans or Department Heads and/or the Associate Vice President of Continuing Studies for final approval.

#### **IV.** Program Administration

Implementing and maintaining appropriate administrative policies and procedures, student support services, financial administration, and promotion and marketing are the responsibility of the unit which has consented to administer the program. Academic units are encouraged to work with Continuing Studies in this regard.

#### V. Program Review Process

To ensure continuing quality and relevance, each program is subject to review by Continuing Studies or the academic unit offering the program within a specified time period not exceeding five years.

Dr. Vanderstoep	٦	That Senate adopt the revised guidelines for
Dr. Uegama	}	the establishment of Certificate Programs as
6		outlined in items I, II, III, IV and V.

Dean Marchak drew attention to the proposed Program Approval Process, noting that the Faculties are excluded from the approval process. She stated that in the case of academic programs, rigorous reviews are performed by curriculum committees and Faculties with regard to space, faculty, and other resources involved in introducing a new program. It appeared from the proposal before Senate that no such procedures are to be followed in the case of certificate programs, which may include credit courses. Dean Marchak suggested that the proposal be referred back to the committee for further consideration with a request that all Faculties be given an opportunity to comment.

Dean Marchak	٦	That the proposal be referred back to the
Dr. Shearer	}	committee for further consideration.

#### Carried.

It was agreed that those members of Senate who wish to comment on the proposal should address their comments to the chair of the committee, Dr. Vanderstoep.

#### CURRICULUM COMMITTEE (SEE APPENDIX)

Dr. Berger, chair of the committee, presented the following report:

#### Faculty of Agricultural Sciences

The committee recommended approval of curriculum proposals from the Faculty of Agricultural Sciences. Dr. Berger noted that references to "transfer of credit" in the proposed Calendar entry under Exchange Programs should be deleted. He explained that exchange students are registered at UBC and therefore "receive credit", they do not transfer credit.

# Faculty of Applied Science

The committee recommended approval of curriculum proposals from the Faculty of Applied Science, subject to editorial changes. Dr. Berger informed Senate that a proposal outlined in the report to add a new course, ELEC 262, had been withdrawn. Any references to ELEC 262 in the second year Electrical Engineering program should read ELEC 261. He also noted that the proposal to drop MATH 254 from the second year Geological Engineering program only applies to two of three options (Option 1 and Option 3). MATH 254 remains in Applied Geophysics (Option 2).

# Faculty of Arts

The committee recommended approval of curriculum proposals from the Faculty of Arts, subject to the words "pre-conquest" being changed to "pre-contact" in the description of Fine Arts 262.

# Faculty of Dentistry

The committee recommended approval of a proposal from the Faculty of Dentistry to change the grading for OMSS 448 from pass/fail to percentage.

CALENDAR STATEMENT ON THE NEW "CASE BASED" CURRICULUM

The following Calendar statement, advising applicants and those considering application to the Faculty of Dentistry of changes to the curriculum which will become effective August 1997, had been circulated for information.

Commencing August 1997, the Faculty of Dentistry intends to implement a new "case based" curriculum, the first two years being taken with students in the Faculty of Medicine. The curriculum will stress self-directed student learning and problem solving in seminars. Traditional lectures and laboratories will occupy only a small amount of curriculum time.

Integration of the dental and medical curricula is a response to recommendations in "Dental Education at the Crossroads: Challenges and Change", a report of the National Academy of Sciences' Institute of Medicine in the USA. The curriculum would continue to meet accreditation requirements of the Commission on Dental Accreditation of Canada.

In addition to the courses taken with medical students, it is likely that the first two years also will include a course exclusively for dental students that will correlate basic sciences to clinical dentistry. Currently, the third and fourth years of the new curriculum also are under development.

The new curriculum may be considerably longer than the current curriculum. Further details are available from the Dental Admissions Office.

# Faculty of Forestry

The committee recommended approval of curriculum proposals from the Faculty of

Forestry, subject to the designation for the Wood Products Processing Major being

changed from B.Sc. (Wood Products Processing) to B.Sc. (Forestry).

#### Faculty of Graduate Studies

The committee recommended approval of curriculum proposals from the Faculty of Graduate Studies, subject to editorial changes.

#### Faculty of Medicine

The committee recommended approval of curriculum proposals from the Faculty of Medicine. Proposed changes to MEDG 410 had been withheld pending submission of a similar change from the Faculty of Science for MICB 402 which is listed as the same course. Dr. Berger informed Senate that this change had since been forwarded to Senate under editorial changes and the committee therefore recommended approval of changes to MEDG 410.

# School of Rehabilitation Sciences

The committee recommended approval of curriculum proposals from the School of Rehabilitation Sciences.

# Editorial changes

Dr. Berger also presented a list of editorial changes, for information.

Dr. Randall drew attention to a Calendar statement contained in the submission from the Faculty of Agricultural Sciences to the effect that no further admissions to the Bachelor of Landscape Architecture program will be accepted after September 1, 1996. He explained that this proposal was contingent upon related changes being approved by the Faculty of Graduate Studies. It was agreed that approval of the proposed Calendar statement be withheld for the time being.

In response to a query, the Registrar explained that many of the changes referred to by the chair of the Curriculum Committee are in fact the legitimate outcome of the process of scrutiny, and reflect the fact that the written material is prepared at the time the submissions go to the Faculties. The amendments and changes suggested during the Senate Curriculum Committee approval process are recommendations to Senate and cannot therefore be incorporated in the material attached to the report without Senate approval.

Dean Marchak drew attention to the International Resource Systems new study option in the proposals from the Faculty of Agricultural Sciences stating that it contained a number of options from the Faculty of Arts. She asked if the program contained enough options to ensure that the Faculty of Arts was under no obligation to students taking the International Resource Systems study option if they could not be accommodated in some of the Arts courses listed in the proposal. Dean Richards stated that each department involved had been consulted and had approved the proposed offerings. He felt that there was sufficient flexibility in the program to avoid the problem anticipated by Dean Marchak.

Dean McNeill asked for clarification of the proposed Calendar statement from the Faculty of Dentistry alerting students to the fact that the new "case based" curriculum may be considerably longer than the current curriculum. Dean Yen explained that the length of the current program is four years but that the number of months used for study within those four years could be expanded. The range being considered was anything between four and five years using extra months within these years. In response to a query by Dr. Shearer, Dean Yen assured Senate that it was not the intention that students enrolled in the existing program would be adversely affected by the extended program.

In response to a query by Dean Marchak, Dean Richards explained that the former term for "Cultural Diversity" was "breadth electives" and that the new term is a notation for a block of courses to be chosen by students, in consultation with an advisor, from a wide range of courses from around the University that will contribute to a student's understanding of cultural diversity. It was pointed out that the accompanying footnote did not appear to be correct. Dr. Berger said that this could be corrected and put through as an editorial change.

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Dr. Berger Mr. A. Lau That the proposals of the Faculties of Agricultural Sciences (with the exception of the statement on the Landscape Architecture program), Applied Science, Arts, Dentistry, Forestry, Graduate Studies, Medicine, and the School of Rehabilitation Sciences, be approved, subject to editorial changes.

Carried.

Dean Binkley referred to the change in the designation for the Wood Products Processing Major from B.Sc. (Wood Products Processing) to B.Sc. (Forestry), and informed Senate that the Faculty will be examining the possibility of a uniform degree title for all programs. If the Faculty is able to find a satisfactory uniform degree title other than B.Sc. (Forestry), it would bring a proposal back to Senate to change the title.

#### TRIBUTES COMMITTEE

#### Honorary B.Sc. (Pharm.) degrees

Dean McBride, chair of the committee, informed Senate that in celebration of the 50th anniversary of the Faculty of Pharmaceutical Sciences, the Faculty wishes to offer honorary B.Sc. (Pharm.) degrees to those persons who became members in good standing of the College of Pharmacists of British Columbia (formerly the Pharmaceutical Association of the Province of British Columbia) and who received their training in this province prior to the granting of B.Sc. (Pharm.) degrees by The University of British Columbia.

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Dean McBride Dean McNeill

That all persons who became members in good standing of the College of Pharmacists of British Columbia (formerly the Pharmaceutical Association of the Province of British Columbia) and who received their training in this province prior to the granting of B.Sc. (Pharm.) degrees by The University of British Columbia, Faculty of Pharmaceutical Sciences, be eligible upon application or nomination to be considered for the conferring of an honorary B.Sc. (Pharm.) degree from The University of British Columbia provided that the applicant/nominee does not already possess a B.Sc. (Pharm.) degree or its equivalent.

Carried.

#### **Faculties of Medicine and Science**

PROPOSAL TO ESTABLISH A BRAIN AND SPINAL CORD RESEARCH CENTRE Vice President Birch spoke briefly to a proposal to establish a Brain and Spinal Cord Research Centre, an academic research centre in the Faculties of Medicine and Science in partnership with the Vancouver Hospital and Health Sciences Centre. Vice President Birch said that he had been asked by the Deans of the Faculties of Medicine and Science to amend the composition of the Advisory Committee to include the Coordinator of Health Sciences.

Dr. Birch Dean Hollenberg	}	That the proposal to establish a Brain and Spinal Cord Research Centre in the Faculties of Medicine and Science in partnership with the Vancouver Hospital and Health Sciences
		Centre be approved.

In response to a query by Mr. de Pfyffer, Dean Hollenberg stated that the McGeers are among UBC's most prominent neuroscience researchers and will be an integral part of the new centre as long they continue to do research at UBC.

On behalf of Dean Grace, Dr. Randall noted that Graduate Studies has a very active and successful neuroscience program operating at the moment, involving students and faculty from both Science and Medicine, and expressed the hope that there would be good coordination between this group and the proposed centre.

Dr. Gilbert drew attention to the reference to the "Vancouver Hospital and Health Sciences Centre", stating that the campus community should realize that the Vancouver Hospital and Health Sciences Centre facility should not be confused with the John F. McCreary Health Sciences Centre. He explained that the Vancouver Hospital and Health Sciences Centre is part of VGH, not part of UBC and that the John F. McCreary Health Sciences Centre embodies all of the health sciences centre buildings and activities. Dr. Gilbert said that he wished to ensure that the University community remembers a remarkable educator at UBC who was head of Paediatrics, Dean of Medicine and Coordinator of Health Sciences. The University Librarian, Dr. Patrick, expressed support for the proposal but was concerned that the Library could have difficulty in supporting the research needed in such a program. Dr. Patrick informed Senate that she had been informed by Margaret Price, Acting Head of the Life Sciences Library, that last year 6000 dollars worth of journals were cancelled and that it was probable that the same amount would be cancelled this year. However, after speaking to Dean Hollenberg, Dr. Patrick said she was heartened by his commitment that he and the Faculty of Medicine would join with the Library in ensuring that adequate library resources are available to serve this program.

Mr. Brady noted that the initiative includes a commitment by the Vancouver Hospital and Health Sciences Centre to raise half of the project's total goal of \$28 million and asked how the other \$14 million is to be raised. Dean Hollenberg responded that this money would be raised by the Faculty of Medicine through a fund-raising project which would be endowed, and that the ongoing costs would be covered through the endowment. In addition, he stated that the investigators will be applying to the Medical Research Council for operating money.

The motion was put and carried.

#### **Calendar changes**

The Registrar, Dr. Spencer, presented the following changes to the Calendar, for information:

**Religious Holidays.** The following statement, taken from the University Policy on Religious Holidays, will be included in the Academic Regulations section of the Calendar.

# **Religious Holidays**

Recognizing the religious diversity of the UBC community, UBC permits students who are scheduled to attend classes or write examinations on holy days of their religion to notify their instructors in advance of a holy day they wish to observe by absenting themselves from class or examination. Instructors will provide opportunity for such students to make up work or examinations missed without penalty.

Students are required to give two weeks' notice of their intention to absent themselves under the terms of the University Policy on Religious Holidays. They shall notify the instructor of each course or, where this cannot be done, the Head or Director of the unit concerned.

This addition was suggested by the Faculty of Education and has the support of the Faculties of Arts and Science.

**Student Discipline.** The statement in Penalties, item 2 (Calendar, page 53) will be amended to read (new wording in *italics*):

2. Suspension from the University for a specified time, or indefinitely. *Students will not receive credit for courses taken at another institution during a suspension*.

This change clarifies the existing policy.

# **Other business**

# ACADEMIC ADVISING

Mr. Culhane stated that through a survey of students, the Campus Advisory Board on Student Development had established that a great proportion of students are dissatisfied with certain aspects of academic advising. Acting on the advice of the Senate Agenda Committee, Mr. Culhane approached the office of the Vice President of Student and Academic Services and received a commitment that there would be a forum on academic advising on March 15. Mr. Culhane expressed the hope that members of Senate would participate in this event and work together in an effort to resolve students' concerns on this issue. In response to a query by Dr. Randall, Mr. Culhane stated that discussions would include both graduate and undergraduate advising.

# LIBRARY RESOURCES

In view of the extensive cutbacks being made by the Library, Dr. MacEntee asked whether there were any safeguards to ensure that these cuts were not having a detrimental impact on existing courses.

Dr. Patrick stated that the Library was working closely with the Faculties in selecting what is to be cancelled. She stated that the Senate Library Committee is looking at redesigning the scholarly communication system and intends to bring a proposal to Senate that will address long term measures. In the meantime, however, approximately 5% of all serials will have to be cancelled in 1996 and 1997.

# Adjournment

The meeting adjourned at 9:10 p.m.

#### Next meeting

The next regular meeting of Senate will be held on Wednesday, February 14, 1996.

#### Appendix

#### COURSE AND CURRICULUM PROPOSALS

#### Faculty of Agricultural Sciences

Changes in Calendar entries on Exchange Programs, Canadian exchanges, Exchanges abroad

New Calendar entry: Students performance in written work in all courses in the Faculty of Agricultural Sciences may be evaluated in part on grammar and syntax.

New courses:	AGSC 301 (3) Aquaculture Field Studies AGSC 302 (3/6)d International Field Studies
Changes:	PLNT 321 - change title, prerequisite and description PLNT 411 - change description and prerequisite SOIL 321, 422 - change description

New Study Option - International Resource System

#### Faculty of Applied Science

#### **BIO-RESOURCE ENGINEERING**

New courses:	BIOE 382 (3) Bioprocessing Fundamentals
	BIOE 473 (3) Design of Biowaste Conversion Systems
	BIOE 482 (3) Bioprocessing Application
Deletions:	BIOE 306, 356, 472, 480, 481
Changes:	BIOE 355, 456, 471, 485 - change title and description BIOE 361, 464 - change description

#### Program changes

#### CHEMICAL ENGINEERING

CHML 474 (2) Process Control Engineering
CHML 484 (3) Pollution Prevention Engineering for Chemical and
Process Industries
CHML 364 (2) Environmental Chemical Engineering Laboratory
CHML 365 (2) Biotechnology Laboratory
CHML 452 (6) Environmental Process Design Project
CHML 453 (6) Biotechnology Process Design Project

New courses:	CHML 485 (3) Air Pollution Control CHML 489 (3) Pollution Control in the Pulp and Paper Industry CHML 493 (1) Thesis Proposal-Environmental Topic CHML 494 (5) Thesis-Environmental Topic CHML 495 (1) Thesis Proposal-Biotechnology Topic CHML 496 (5) Thesis-Biotechnology Topic
Changes:	CHML 345 - change in number to 245 CHML 356, 475 - change in title and description CHML 359 - change in number to CHML 459 (effective September 1997) CHML 498 - change in credits

# Program changes

# CIVIL ENGINEERING

New courses:	CIVL 408 (3) Geo-Environmental Engineering
Changes:	CIVL 221 - change in number to 320 CIVL 305 - change in number to 406 CIVL 331 - change in title and prerequisite CIVL 430 - change in title and description

# Deletion: CIVL 405

# Program changes

# ELECTRICAL ENGINEERING

New courses:	ELEC 265 (3) Circuits and Electronics
	ELEC 285 (3) Group Project
	ELEC 453 (3) Communications Systems
	ELEC 454 (3) Digital Communications
	ELEC 488 (3) Electric Power Transmission
	ELEC 489 (3) Electric Power Networks
Changes:	ELEC 251, 253, 256 - change in description ELEC 254, 259, 281, 371, 372 - change in hours ELEC 280 - change in credits and hours
	ELEC 280 - change in credits and nours
Deletions:	ELEC 455, 463

Program changes

ENGINEERING PHYSICS

Program changes

GEOLOGICAL ENGINEERING

Program changes

MECHANICAL ENGINEERING

New courses:	MECH 261 (3) Applied Mechanics of Materials
	MECH 353 (5) Engineering Product Design I
	MECH 354 (5) Engineering Product Design II
	MECH 356 (3) Machine Components
	MECH 463 (3) Computer Controlled Machines
	MECH 492 (4) CAD/CAM
Changes:	MECH 351 - change in description MECH 495 - change in prerequisite

Program changes

METALS AND MATERIALS ENGINEERING

New courses:	MMAT 389 (1) Seminar I MMAT 451 (1) Microstructural Analysis Laboratory MMAT 464 (3) Engineering Design I MMAT 465 (3) Engineering Design II MMAT 466 (3) Engineering Project I MMAT 467 (3) Engineering Project II MMAT 489 (1) Seminar III
Changes:	MMAT 363 - change in hours MMAT 390, 490 - change in title and hours MMAT 450 - change in number to 350 MMAT 458 - change in title and description MMAT 494 - change in number to 394
Deletions:	MMAT 480, 483, 488, 492, 495, 499

Program changes

MINING AND MINERAL PROCESS ENGINEERING

Program change

#### Faculty of Arts

#### CLASSICS

Change in program statements

#### FINE ARTS

Change in program descriptions

Change to course offering preamble - students must register for 12 credits from the second year studio art courses listed below, including FINA 281. Students wishing to enrol in fewer courses may register only at the end of the registration period and on a "space available" basis.

Changes:	FINA 181, 251, 335, 337 - change in description FINA 261, 331, 333, 365, 369 - change in title and description
Deletions:	FINA 373, 375
New courses:	FINA 253 (3) Aspects of Asian Architecture FINA 262 (3) Native Arts of North America FINA 300 (3) Approaches to Art History FINA 332 (6) Art of the High Middle Ages FINA 432 (3) Seminar in Art of the High Middle Ages FINA 436 (3) Seminar in 16th-Century Art FINA 438 (3) Seminar in 18th-Century Art FINA 452 (3) Seminar in Chinese Painting FINA 454 (3) Seminar in Japanese Painting FINA 458 (3) Seminar in Southeast Asian Art
Changes:	FINA 455 - change in number to 457, credits, title and hours FINA 431, 433, 435, 437, 451, 453 - change in credits, title and hours FINA 439, 440, 443, 448, 463, 465, 469 - change in credits and hours FINA 481, 482, 483, 484, 485, 486 - change in credits
culty of Dentistry	

#### Faculty of Dentistry

Change: OMSS 448 - change in grading from pass/fail to percentage

#### Faculty of Forestry

Changes to Calendar entries and program listing for the Forest Sciences Major

Changes:	FRST 387 - change in description
	FRST 310 - to be cross-listed with SOIL 321
	FRST 410 - to be cross-listed with SOIL 422

Changes:	FOPR 363 - add: co-requisite WOOD 376			
	FRST 231 - change in title and description, cross-list with PLNT 321			
	FRST 486 - change in prerequisite			
	WOOD 282, 400 - change in title			
	WOOD 300, 310 – change in title and credits			
In list of electives change LAW 356 to LAW 392				
New courses:	WOOD 243, 273, 290, 310, 330, 430, 440, 464, 490, 491, 492, 493, 494			

New Major in Wood Products Processing (degree designation B.Sc. Forestry)

# Faculty of Medicine

ANATOMY	
New course:	ANAT 448 (1-6)d Directed Studies in Anatomy
Deletion:	ANAT 451
INTERDEPARTMENTAL	
New:	INDE 451 (0) Clinical Skills III

# Faculty of Graduate Studies

Commerce			
New course:	BAMA 509 (1.5) Advertising		
Changes:	COMM 596 split into two modules, BAPA 517 and 518		
Deletions:	COMM 313, 381, 500, 503, 506, 507, 508, 509, 521, 522, 523, 524, 526, 527, 529, 533, 534, 538, 550, 556, 557, 563, 564, 565, 566, 574, 578, 579, 580, 589, 594, 595, 596		
COMPUTER SCIENCE			
Changes:	CPSC 589 - change in credits		
New course:	CPSC 500 (3) M.Sc. Major Essay		
EDUCATION			
New courses:	EPSE 511 (3) Special Topics in Human Development in Education EPSE 550 (3) Professional, Ethical and Legal Issues in School Psychology EPSE 681 (3-12)d Topics in Educational Research and Measurement EPSE 551 (3-6)d School-based Consultation CNPS 551 (3) School-based Consultation CNPS 552 (3-6)d Interventions in School Psychology		

Changes:	EPSE 505 - change in title and credit value, delete description EPSE 509 - change in title, delete description		
GEOLOGY			
New course:	GEOL 561 (3) Field Laboratory in Groundwater Hydrology		
MEDICAL GENETICS			
New courses:	MEDG 515 (3) Mammalian Developmental Genetics MEDG 525 (3) Medical Population Genetics		
Change:	MEDG 530 - change credits and description		
Change in program description			
PHARMACEUTICAL SCIE	NCES		
Deletions:	PHAR 500, 555, 560, 561		
New courses:	PHAR 525 (4) Pharmaceutical Research Techniques I PHAR 526 (4) Pharmaceutical Research Techniques II PHAR 584 (3) Cell Culture		
PHYSICS			
Change:	PHYS 522 - change credits, title, description and prerequisite		
SOIL SCIENCE			
Deletions:	SOIL 501, 502, 516, 518, 533		
Change:	SOIL 504 - change in title		

#### School of Rehabilitation Sciences

Changes in Calendar statements

General Information - Students must complete the requirements for the B.Sc. (O.T.) and B.Sc. (P.T.) degrees within six years of admission to the program.

Changes: RSOT 322, 436 - change in credits and hours RSPT 414 - change in credits and hours

Department	t Course	Calendar page	Change
AGEC	407		Prerequisite
AGEC	411		Prerequisite
AGEC	420		Prerequisite
AGSC		93 b	Ag. Canada Research Branch
AGSC		60 b	Correction of fee statement
AGSC		93 a	New statement of application fee
AGSC		60 b	AGSC 301 field trip fee
AGSC		60 b	AGSC 300 field trip fee increase
AGSC		88 b	"On graduation
ASIA	504		Title
ASIA	522		Title
ATSC	200		Title
ATSC	300		Title, description
BAFI	501		Description
BAFI	502		Description
BAFI	503		Description
BAFI	505		Description
BAFI	507		Description
BAFI	514		Description
BAFI	518		Description
BAFI	580		Description
BAHR	520		Description
BAIM	511		Description
BAMS	510		Title
BATL	510		Title
BATL	580		Title
BIOL		323 a	Cell Biol. & Genet. Electives
BIOL		331 c	"Animal Biol. Electives
BIOL	153		Description
BIOL	335		Prerequisite
BIOL	335		Prerequisite
BIOL	452		Title
CHML	345		Number
CHML	359		Number
CIVL	221		Number
CIVL	305		Number
CLST			Change in department name
CLST		98 b	List of courses
CLST		84 b	List b, list of courses
CLST		83 b,c	List of courses
CLST		102 b	List of courses
CLST	303		Number
COMM		155 c	"Management Information Syst"

DepartmentCourseCalendar pageChangeCOMM154 c, 155 a"Second yearCOMM155 c"Management Info. Syst. 2 <sup>nd</sup> yearCOMM232 a"M.B.A. Degree The Core (Part-time)COMM232 a"Students acceptingCOMM609DescriptionCOMM654DescriptionCPSC327 c"CPSC 100CPSC386 c"Note: studentsCPSC386 c"100 (3) ElementsEDUC222 bClarification of credit requirementsEDUC234 aClarification of promotion requirementENGL390DescriptionENGL446TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546TitleENGL546Clarification of admission requirementFINA169 bM.A. in Art HistoryFNAR237 bClarification of program requirement
COMM155 c"Management Info. Syst. 2 <sup>nd</sup> yearCOMMXXX"M.B.A. Degree The Core (Part-time)COMM232 a"Students acceptingCOMM609DescriptionCOMM654DescriptionCPSC327 c"CPSC 100CPSC386 c"Note: studentsCPSC386 c"100 (3) ElementsEDUC222 bClarification of credit requirementsEDUC234 aClarification of promotion requirementENGL390DescriptionENGL446TitleENGL546TitleENGL546TitleEPSE235 cClarification of admission requirementFINA169 bM.A. in Art History
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FINA   169 b   M.A. in Art History
FNAR 2.37 b Clarification of program requirement
FOPR 363 Prerequisite
FRST 207 b Addition of footnote
FRST205 b cChanges to footnote
FRST231Title, description
FRST486Description, prerequisite
GEOG 132 c Deletion of redundant phrase
GEOG 133 a Change in list of courses
GEOG 374 Description
GEOG 390 Description
GEOG 425 a Change in list of courses
GEOL 119 c Addition of GEOL 312 to list of courses recommended for Arts students
GEOL 235 Prerequisite
GEOL 442 Term
GEOL 444 Term
GEOP 328 a Pairing list
HIST 426 Description
HKIN 216 a
HKIN 263 a
HKIN 262 b
HKIN 110 Title, description
HKIN 200 Number, title, description
HKIN 362 Description
HKIN 364 Prerequisite

HKIN 368 Prerequisite	
HKIN 371 Prerequisite	
HKIN 481 Prerequisite	
IRM 525 Description	
ITAL 548 Credits, title	
LAST 136 c Change to course list	
LAST 136 c Change to course list	
LATN 411 Prerequisite	
LATN 411 Prerequisite	
LATN 411 Prerequisite	
LATN 412 Prerequisite	
LATN 413 Prerequisite	
LATN 414 Prerequisite	
LATN 416 Prerequisite	
LATN 417 Prerequisite	
LATN 418 Prerequisite	
LATN 419 Prerequisite	
LATN 420 Prerequisite	
LATN 421 Prerequisite	
LATN 425 Hours	
LATN 425 Prerequisite	
LSAR 15 a Correction of error in superscript	
MATH 140 Description	
MECH 351 Description	
MECH 495 Prerequisite	
MECH 598 Description	
MICB 342 a "The Dept. of Microbiology	
MICB 321 Prerequisite	
MICB 402 Prerequisite, pairing list	
MMAT 363 Hours	
MMAT 390 Term	
MMAT 398 Term	
MMAT 450 Number	
MMAT 490 Term	
MMAT 494 Number	
MMAT 498 Term	
MMIB 327 Dept. designator	
MMIB       417       Dept. designator, description	
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MMIB       417       Dept. designator, description	
MMIB417Dept. designator, descriptionMMIB427Dept. designator, title , description	)n
MMIB417Dept. designator, descriptionMMIB427Dept. designator, title , descriptionMMIB437Dept. designator, description	on
MMIB417Dept. designator, descriptionMMIB427Dept. designator, title , descriptionMMIB437Dept. designator, descriptionMMIB447Dept. designator, credits, title, description	on

Department	Course	Calendar page	Change
MMIB	523		Dept. designator, prerequisite
MMIB	527		Dept. designator, description
MMIB	529		Dept. designator, description
MMIB	648		Dept. designator, credits
MMIB	720		Dept. designator, description
MMIB	721		Dept. designator, description
MMIB	722		Dept. designator
MMIB	725		Dept. designator
MMIB	548		Delete
MMPE	551		Description
MMPE	598		Description
MMPE	698		Description
PATH	417		Delete
PHAR		314 b	Req. for Registration – add sentence to calendar statement
PHAR		314 b	Clinical clerkships – add new section
PHAR		314 a	Supplemental etc. add "8) etc
PHAR		314 c	Delete section "Radiopharmacy Residency"
PHAR		315 a	"Hospital residency program
PHAR		315 a	Change to section describing "Application"
PHIL	210		Number, credits
PHIL	551		Credits
PHIL	560		Credits
PHYS		345 b	Clarification of requirements
PHYS	215		Prerequisite
PHYS	250		Description, prerequisite
PHYS	251		Description, prerequisite
PHYS	270		Vector
PHYS	351		Description
PHYS	352		Prerequisite
PHYS	454		Description
PHYS	455		Description
PHYS	458		Description
PHYS	474		Description
PHYS	538		Title, description, prerequisite
PLNT		91 b c	Rewrite of program description
PLNT		91 c, 92 a	Rewrite of entomology offerings
PLNT		472 с	Prerequisite
PLNT	404		Prerequisite
PLNT	498		Description, prerequisite
PLNT	499		Description
PLNT	538		Description
PSYC		141 b c	Clarification of credit requirements
RHSC		319 b	Clarification of prior requirement

Department	Course	Calendar page	Change
RHSC		319 a	Delete redundant sentence
RHSC		319 c	Clarification of requirement
RHSC	202		Vector
RHSC	205		Vector
RHSC	302		Vector
RHSC	311		Vector
RHSC	402		Vector
RHSC	408		Vector
RHSC	420		Vector
RSOT	322		Vector
RSOT	323		Vector
RSOT	418		Vector
RSOT	424		Vector
RSOT	425		Vector
RSOT	434		Vector
RSOT	436		Vector
RSPT	203		Vector
RSPT	206		Vector
RSPT	208		Vector
RSPT	230		Deletion of description
RSPT	304		Vector
RSPT	308		Vector
RSPT	330		Deletion of description
RSPT	411		Vector
RSPT	413		Vector
RSPT	419		Vector
RSPT	430		Deletion of description
RSPT	441		Vector
RSPT	442		Vector
RSPT	443		Vector
RSPT	445		Vector
SOWK	315		Description, credits
SOWK	301		Delete
SOWK	302		Delete
STAT		347 c	Change in course numbers
STAT	519		Prerequisite
STAT	530		Prerequisite
STAT	532		Prerequisite
STAT	533		Prerequisite
STAT	538		Prerequisite
STAT	546	2.10	Prerequisite
STAT	250	348 a	Replace STAT 406 by STAT 406, 461
THTR	250		Corequisite
THTR	251		Corequisite