The third regular meeting of the Senate of the University of British Columbia for the Session 1967-68 was held on Wednesday, December 13, 1967 at 8.00 p.m. in the Board and Senate Room, Administration Building.

Present: Dean W. H. Gage (Chairman), Dean W. M. Armstrong, Dr. C. S. Belshaw, Mr. S. Black, Rev. J. Blewett, Mr. C. B. Bourne, Mr. F. K. Bowers, Mr. F. J. Cairnie, Mr. C. M. Campbell, Jr., Dr. J. D. Chapman, Dr. R. M. Clark, Dean I. McTaggart-Cowan, Dean G. F. Curtis, Miss K. Emmott, Mr. D. A. Freeman, Dr. S. M. Friedman, Dean J. A. F. Gardner, The Hon. Howard C. Green, Dean D. M. Healy, Mr. W. L. Holland, Dr. D. T. Kenny, Dr. P. Larkin, Mr. R. R. Larsen, Rev. E. C. Lebel, Mr. S. L. Lipson, Mr. S. Lefeaux, Dean S. W. Leung, Dr. A. J. McClean, Dean Helen McCrae, Dean J. F. McCreary, Mr. Justice J. MacDonald, Dr. C. A. McDowell, Mr. J. McGechaen, Dr. J. R. McIntosh, Mrs. H. J. MacKay, Mr. D. F. Manders, Mr. G. Mate, Mr. D. F. Miller, Dr. Finlay A. Morrison, Dr. H. P. Oberlander, Dean V. J. Okulitch, Dr. G. J. Parfitt, Dr. A. J. Renney, Dean B. E. Riedel, Dr. R. D. Russell, Dean N. V. Scarfe, Dr. A. D. Scott, Dean M. Shaw, Dr. D. V. Smiley, Dr. J. H. G. Smith, Dr. M. W. Steinberg, Mr. B. Stuart-Stubbs, Mr. E. D. Sutcliffe, Dr. G. H. N. Tower, Mr. M. Waldman, Mrs. B. E. Wales, Dr. H. V. Warren, Dr. Wm. A. Webber, Dean P. H. White, Mr. D. R. Williams, Dr. S. H. Zbarsky.

Observers: Mr. J. Banham, Mr. A. Myers, Mr. G. R. Selman, Mr. H. Elder.

Messages of regret for their inability to attend were received from Mr. J. M. Buchanan, Dr. M. Bloom, Dr. D. M. Brousson, Mr. W. T. Brown, Dr. D. H. Copp, Dr. W. C. Gibson, Mr. J. Guthrie, Dr. N. A. Hall, Dr. W. S. Hoar, Dr. H. L. Keenleyside, Mr. John R. Meredith, Dr. W. Opechowski, Mr. J. V. Rogers, Rev. W. S. Taylor.

Minutes of the Previous Meeting

Dean Gardner)
Dean Shaw)

That the Minutes of the second regular meeting of Senate for the Session 1967-68 held on October 25, 1967 and the Minutes of the Special Meeting of Senate held on November 15, 1967 having been circulated, be taken as read and adopted.

Minutes of the Previous Meeting (Continued)

It was suggested that the second line of the penultimate paragraph on Page 3840 should be amended to read: "Mr. Stover replied that it had been considered but was not an integral part of the plan."

The motion was then carried with the above amendment.

Business Arising from the Minutes of the Previous Meeting

The Chairman explained that the addition of the student senators to the sub-committees of Senate had been dealt with and a full set of committees for the 1967-68 session had been circulated.

The location of the proposed Administration building was questioned by some members who were convinced that it would prove to be an impediment to necessary future expansion in the Health Sciences area adjacent to the Dentistry building. As the opening of tenders for the new building was imminent the Chairman suggested that he and the Bursar meet with Dr. S. M. Friedman and Dr. H. P. Oberlander the following morning to discuss the problem.

It was suggested that to avoid a repetition of this sort of problem provision should be made for the Board of Governors to inform both Senate and Heads of Departments in contiguous areas of the proposed erection of a new building. The information should be provided about six months prior to action being taken in order to give those concerned an opportunity to bring their reasoned comments to the Board of Governors.

Business Arising from the Minutes of the Previous Meeting (Continued)

There was a brief discussion of the resolution passed at the October meeting concerning the possibility of restrictions being necessary on enrolment. It was pointed out that no change had been made in the requirements for admission of students from the schools of this Province, nor had any limitation been imposed. Any restriction on enrolment if found necessary would follow notification to this effect from the Board of Governors which exercises this authority.

Notification of Approval by the Board of Governors of Senate Recommendations

1. Calendar Statements:

   (a) Possible need for restriction on enrolment (P.3826-27).

   (b) Amended admission requirements, students from Grade XII B.C. (P.3828).

   (c) Amended admission requirements, students entering from Grade XII, other provinces (P.3828-29).

2. That Education 400 be offered by correspondence and that General Science 309 and Education 406 be offered as extra-sessional courses during 1967-68.

3. That Biochemistry 410 of the Third Year and Pharmacy 220 of the Second Year be interchanged and that Pharmacy 230 be discontinued.

4. The establishment of an Institute of Asian and Slavonic Studies, and an Institute of International Relations subject to funds being available.

Report of the Committee on the Role and Organization of Senate

At its meeting of October 25, 1967 Senate had referred to the Committee on the Role and Organization of Senate the following motion:

Report of the Committee on the Role and Organization of Senate (Continued)

> "That the Senate meetings and all their proceedings be made public with the proviso that upon the request of two-thirds of the attending members the current business be dealt with in camera."

The Chairman of the sub-committee was asked to speak and in the first instance:

Mr. Bourne)
Dr. Clark)

That the report of the Committee on the Role and Organization of Senate on the above motion be received.

Carried

Mr. Bourne)
Dr. Clark)

That the report of the Committee on the Role and Organization of Senate be adopted, the recommendations being:

1. that a public gallery at Senate meetings should not be established;

2. that the University publish an informative agenda of Senate prior to meetings of Senate; and

3. that the University publish as soon as practicable after each Senate meeting a summary of its proceedings including the arguments made for and against the adoption of policies, this publication to be circulated to the Board, Senate, Faculty, the Ubyssey and interested daily newspapers.

It was reported that the members of the committee had been unanimous in accepting the principle that the business and proceedings of Senate should have current and widespread circulation.

Report of the Committee on the Role and Organization of Senate (Continued)

Although not unanimous in opposition to open meetings of Senate the majority were of the opinion that provision of a gallery would inhibit free discussion and drive effective debate into caucus. The hazards of misquotation and misunderstanding of statements of members as reported in the press were considered significant.

In the ensuing discussion there was strong support for a gallery although some opinion was that visitors admitted to Senate meetings should be limited to faculty and students. Opinion was expressed that a gallery would not inhibit debate but might encourage it. Attention was drawn to the Faculty poll that favoured open Senate meetings and to the fact that all student candidates for Senate membership had spoken in favour of a gallery.

However, the focus of the debate was on the concept of Senate's basic function. Was it political-legislative or legislative-executive? The weight of argument favoured the latter. The argument that these two functions could be coincident by use of the mechanism of forming a committee-of-the-whole and clearing the gallery was refuted as impracticable in view of the nature of debates and the impossibility of foreseeing the need for in camera sittings.

Mr. Waldman)
Dr. Clark) That the vote on the proposal be by secret ballot.

Lost

Report of the Committee on the Role and Organization of Senate (Continued)

The motion on the recommendation of the Committee on the Role and Organization of Senate was then put and carried by a vote of 40 to 15.

Committee on Prizes, Scholarships and Bursaries

A summary of the changes in awards shown in Appendix A had been circulated.

Dean Scarfe)
Dean Okulitch) That the changes in awards be accepted, subject to the approval of the Board of Governors, and that letters of thanks be sent to the donors.

Carried

Faculty Membership

Faculty of Forestry

(a) Three members of the Faculty of Science representing the departments of Botany, Chemistry and Zoology - one of these members to be specifically designated as the representative from the Faculty of Science.

(b) One member of the Department of Geography chosen annually by the Head of that Department.

Faculty of Pharmacy

Addition of a representative of the Department of Physiology.

These represent changes in the constitution of Faculties as approved by Senate at its meeting of December 16, 1964.

Faculty Membership (Continued)

The Dean of the Faculty of Forestry made it clear that the changes were merely to ensure that the members from the Faculty of Science were clearly defined in their representation as there had been some misunderstandings in the past.

Continuing Education in the Health Sciences

Senate received a brief statement indicating that those Faculties and Schools associated with the Health Sciences Centre planned to establish an administrative structure to facilitate co-operation in continuing education in the health professions.

It was pointed out that the statement presented to Senate had not, in fact, been presented to all the Faculties concerned and that the Faculties of Dentistry and Pharmacy had specifically objected to the use of the term "Centre". The proposal had yet to be discussed by the School of Nursing.

The relationship of such an organization to the Department of University Extension was queried. The Director of the Department assured Senate that he had been consulted and that his Department would shortly be making a full report to Senate with the expectation that a review of such matters would follow.

It was reported that as soon as the proposal had been fully considered it would be referred back to the Co-ordinating Committee of the Health Sciences Centre, before being returned to Senate.

* See Page 3887

Proposals from the Faculties (See Appendix 'B')

On behalf of the Chairman of the Curriculum Committee who had been unable to attend,

Dr. Chapman)
Dr. Morrison) That individual proposals of the Faculties and Schools be accepted subject to review by the Senate Curriculum Committee on the understanding that this Committee will be guided by the discussions which take place this evening in Senate and by written statements received from Senate members by January 5, 1968 and finally, that any questions not resolved by January 15 would be referred back to the next meeting of Senate.

Carried

Items referred to the New Programmes Committee for consideration were the proposal from the Faculty of Education for a new Diploma Programme in Education of the Deaf, and a proposal from the Faculty of Science for the establishment of a Department of Computer Science.

Faculty of Agriculture

The Dean indicated that the recommendations represented minor changes, most of them in Animal Science.

Faculty of Applied Science

The Dean explained that there were a number of changes, particularly in the Department of Mechanical Engineering. In most of the departments involved the course load had been decreased, except for one or two instances where there was a slight increase.

School of Architecture

Mr. Henry Elder had been invited to attend the meeting and was asked to explain the proposals of the School. Mr. Elder explained

Proposals from the Faculties

School of Architecture (Continued)

that the two-week pre-session workshop had proved inadequate to provide the stimulus to creative thinking so necessary for beginners in Architecture. The School was of the opinion that the extension of the workshop by four weeks would permit accomplishment of this objective.

He further reported that the School recommended a change in their admission policy to require a baccalaureate degree of most applicants beginning in 1969.

He also noted that Mathematics 202 had been inadvertently omitted from the statement presented to Senate indicating prerequisites for admission to the School.

The Chairman explained that there would be no change in admission requirements for 1968.

The additional costs to students for the extended First Year were pointed out but Mr. Elder reported that a census of students' views had favoured the plan.

Faculty of Commerce and Business Administration

Dean White explained that the changes and additions were to accommodate the revision of the undergraduate curriculum approved earlier by Senate.

Proposals from the Faculties (Continued)

Faculty of Dentistry

Programme of Dental Hygiene

The Dean reported that the courses had already been approved and that the material presented was intended for the 1968-69 calendar.

An objection was raised to the use of the term "professional" in connection with this course. The Chairman suggested that the item be reviewed following a study of the wording in the Calendars of the Universities of Toronto, Alberta and Manitoba where similar programmes were described.

Faculty of Education

The Dean had no comments to make but a member commented on the growth of two independent departments of Psychology at this University. There were at least 10 psychology courses under Education and practically equivalent courses in the Department of Psychology. It was agreed that the attention of the Curriculum Committee be directed to this matter.

Faculty of Forestry

There was no discussion of this submission which represented minor adjustments only.

Proposals from the Faculties (Continued)

Faculty of Graduate Studies

The Dean explained that the proposed course changes did not represent more than minimum adjustments. He also explained that it had been the custom to accept only courses numbered 400 and above in a Ph.D. programme. The proposal to permit courses at the 300 level for credit on a Ph.D. degree programme on the same basis as 400 level courses was justified by the additional flexibility provided and the lack of distinction between courses at this level. Courses at the 300 and 400 level would not normally be taken except in a field ancillary to a student's main subject of study.

School of Home Economics

The proposals were minor and consisted chiefly of readjustments of the programme in Nutrition.

Faculty of Law

The Dean explained that the proposal to change the deadline for applications for admission to the Faculty from July 31 to July 1 was to permit additional time for the study of the applications by the Admissions Committee.

He also explained the proposal to institute a $50 deposit payable by those students who had been notified that they had been accepted. The purpose was to permit greater accuracy in allocation of places in the First Year class.

Proposals from the Faculties (Continued)

Faculty of Medicine

The Dean asked that the proposal to divide Biochemistry 410 into two courses totalling 4½ units which was still under discussion be withdrawn from the Faculty submission to this meeting of Senate.

He explained that the proposal of the Department of Physiology was an attempt to provide greater depth in the teaching of this subject.

School of Nursing

Dean Armstrong explained that the changes in the School of Nursing were substantial. The course load for both staff and students had been getting progressively heavier over the past few years and field work had carried through to July. The proposed changes would reduce the work to a reasonable level and provide a three-month break each summer for the students.

The Dean was asked to check into the necessity of courses in Nursing overlapping those of the Department of Psychology and possibly other departments.

Faculty of Pharmacy

The Dean reported that the proposed changes were relatively insignificant. Comments on the paucity of humanities or social science courses in the Pharmacy curriculum were answered by noting

Proposals from the Faculties

Faculty of Pharmacy (Continued)

the similarity with programmes in other Faculties and by pointing out that recommended electives were generally non-science.

School of Physical Education

The proposals were minor and were discussed only briefly.

Faculty of Science

The Dean explained that the Programme in Astronomy was not new as it had been approved previously by Senate. The present submission gave the courses in detail.

In the discussion of the course proposals the question was raised of the advisability of requiring a student to commit himself to an honours programme at the end of the First Year. It was suggested that greater flexibility would be desirable in the subsequent studies of a student who elects to begin the honours programme at the end of the Second Year.

A question was raised as to the availability of service courses in Mathematics, prepared for students in the B.Com. programme, to students in other programmes. No answer was given and the questionner was referred to the Department of Mathematics.

The proposal to establish a Department of Computer Science in the Faculty of Science had been referred by the Agenda Committee to the New Programmes Committee.

Report of the Librarian

Dean Cowan, Chairman of the Senate Committee on the University Library, gave a brief summary of the Report. He remarked on the considerable achievements of the Library over the past year pointing out the increased use of library materials and the substantial investments in book purchases and in provision of new facilities.

The Report also detailed the difficulties being experienced at the present and the future prospects. Student complaints of lack of study space and insufficient supply of required reference material were justified. The problem of providing adequate access to the Library was serious. Although the hours of library service were longer than in any other Canadian university library this was based on the uncertainty of voluntary service by librarians who gave of their own time to keep the Library open on Sundays.

The Librarian was complimented on the excellence of the Report.

In the general discussion of the Report attention centred on possible solutions to the problems facing the Library in the future. Continuing study was being undertaken by the Senate Committee on the University Library. Furthermore, to assist Senate in obtaining a complete picture of the situation it was agreed that a summary of the financial aspects of the problems confronting the Library would be circulated with the agenda of the February meeting of Senate.

Other Business

Dean Healy referred to the Minutes of the Senate Meeting of May 20, 1964, (p. 3367 of the Minutes) in which a resolution passed by Senate stated, in part,

> "That course changes approved by the Faculties from the academic standpoint, and not involving a budget request for additional funds (either current or capital), be eligible for consideration by Senate at any regular meeting."

Dean Healy agreed to raise this matter with the Chairman of the Curriculum Committee.

The meeting adjourned at 11.00 p.m.

The next meeting will be held on Wednesday, February 14, 1968, at 8.00 p.m.

Secretary

Confirmed

Chairman

APPENDIX A

Summary of Changes in Awards Recommended to Senate

The Health Officers' Prizes

Instead of one prize of $100, two cash prizes of $100 each have been provided and will be awarded to two students in the graduating class of Medicine. The prizes will not necessarily be awarded annually. Both prizes will be given to students who have demonstrated leadership and academic or research ability, selected by the Department of Health Care and Epidemiology after consultation with the Health Officers' Council of British Columbia. One prize will be awarded for meritorious scholarship in the field of public health, preventive medicine or epidemiology; the other will be awarded for meritorious scholarship in the field of health care research and administrative medicine.

M. M. Waterman Bursary

Increased from $25 to $50. Also the bursary is now to be awarded to a student in the Faculty of Dentistry who has good scholastic standing and is in need of financial assistance.

APPENDIX B

NEW COURSES, COURSE AND CURRICULUM CHANGES AND CHANGES IN REGULATIONS

FACULTY OF AGRICULTURE

General

New course	100	title and description changed

Animal Science

Changes in title and/or description: 200, 318, 320, 322, 420, 422;

	419	renumbered 423

Dairying

Changes	200	description changed
	413	title and description changed

Plant Science

Change	406	description changed

Poultry Science

Change	313	unit value reduced from 3 to 1½

Soil Science

Change	311	title and description changed

FACULTY OF APPLIED SCIENCE

Chemical Engineering

Changes	453	divided into:
	453	Economics of Plan Design)
	454	Process Design Project)

FACULTY OF APPLIED SCIENCE (Continued)

Civil Engineering

Changes	360	description and hours changed
	472	hours increased

Electrical Engineering

Changes	351	title, description and hours changed

Geology	150	title and description revised
	204	second term of course to be available to Mineral Engineering students under title Geology 254

Mechanical Engineering

Major revision to third and fourth year programmes in Mechanical Engineering. Third and Fourth Year courses completely revised - complete list of the courses as follows:

352	Graphics in Analysis and Design
358	Machine Tool Laboratory (new course)
363	Mechanics of Materials I
364	Design Seminar
365	Dynamics I
367	Applied Mechanics
372	Instrumentation and Measurement Laboratory
378	Thermodynamics I
384	Fluid Dynamics
391	Industrial Systems (new course)
398	Engineering Report
458	Industrial Engineering
463	Mechanical Design
465	Dynamics II
466	Automatic Control
467	Advanced Dynamics
468	Mechanics of Materials II
469	Optical Engineering
472	Project and Design Laboratory
473	Thermal Processes
476	Heat and Mass Transfer
478	Thermodynamics II

FACULTY OF APPLIED SCIENCE

Mechanical Engineering (Continued)

479	Thermal Power
481	Aerodynamics
484	Dynamics of Real Fluids
491	Industrial Management
498	Engineering Report

The proposed revision involves the following:

(a) Elimination of existing Options I and II in both Third and Fourth Years.

(b) Institution of a common Third Year programme for all students.

(c) Provision of a 9-unit course "core" and a large number of elective courses in the Fourth (final) Year. (Students will elect 9 or 10 units of elective courses.)

(d) Major re-grouping of the subject matter of existing Mechanical Engineering courses (see lists above) consistent with the implementation of (a), (b) and (c).

(e) Existing Third Year core courses in Metallurgy, Met. 376 and Met. 377 to be replaced by new lecture course, Met. 380.

(f) Existing Option I Third Year course E.E. 351 to be revised to become part of the Third Year core curriculum

Metallurgy

New courses	380	Structure and Properties of Materials
	480	Fracture
Changes	376)	replaced by new course Metallurgy 380
	377)	
	370	increase in hours
	456	title changed to Hydrometallurgy, Kinetics & Corrosion, hours increased
	482	hours increased
Deletion	460	

FACULTY OF APPLIED SCIENCE (Continued)

Mineral Engineering

New courses	356	Rock Properties
	372	Flotation
	472	Mineral Stability
Course changes	250	hours changed
	350	description and hours changed
	351	title description and hours changed
	352	hours changed
	452	hours reduced
	453	hours changed
	458	hours changed
	471	Laboratory added second term increasing hours.

Agricultural Engineering

Third Year	Replace Mathematics 357 by M.E. 391 Replace M.E. 363 by 363 and 365 Replace M.E. 381 by 378 and 379
Fourth Year	Electives: Drop M.E. 361 Add electives M.E. 367, 468 and 466

Chemical Engineering

Fourth Year	Present course 453 to be divided into 453 and 454

Metallurgy

Fourth Year	Elective units required of Fourth Year students increased from 5 to 6

Mineral Engineering

Second Year	Geology 204 replaced by Geology 254 Geology 300 added
Third Year	C.E. 360 deleted Geology 300 and 317 replaced by Geology 320 Min 356 (new course added)

FACULTY OF APPLIED SCIENCE

Mineral Engineering (Continued)

Option I - Add min 351 and 458
Required electives decreased from 6 to 3 units.

Option II New course Min 372 added

(A reduction in hours per week by approximately 2 for Option I and 1 for Option II)

Fourth Year Add: Min 352
E.E. 451

Option I: Add Min 454
Delete Min 455
(Required electives reduced to 3 units)

Option II: Add Min 472
Delete Met 460
Delete Elective requirement

(Hours for Option I maintained at the same level as before. Hours for Option II slightly increased.)

Changes in Admission Requirements

1. From other B.C. Universities and Colleges

(a) Chemistry requirement from Simon Fraser University

Chemistry 101, 102, 106, 116
or
Chemistry 102, 103, 116, 117

(Chemistry 116 and 117 are the laboratory courses associated with Chemistry 102 and 103.)

(b) General statement concerning requirements from other B.C. Universities and Colleges

Modification of the statement regarding admission to Applied Science from other B.C. Universities, to make it clear that exceptions to the stated regulations will be considered. The heading of the section at the bottom of Page All of the 1967-68 Calendar (General Information Bulletin) to be altered to read:

FACULTY OF APPLIED SCIENCE

Changes in Admission Requirements

1. From other B.C. Universities and Colleges

   (b) General Statement concerning requirements from other B.C. Universities and Colleges (Continued)

   "Subjects normally required from other B.C. universities and colleges"

   (The word "normally" being an addition)

2. Admission of Second Year Science Students

   The Faculty of Applied Science approved in principle admission of Second Year Science students to Second Year Engineering.

School of Architecture

1. Proposal to extend First Year Architectural Workshop by four weeks

   That Architecture 406, Architectural Workshop I be extended by four weeks; that the unit value be increased from 1 to 2; that in future it begin six weeks before the beginning of lectures in the fall term (approximately August 1); description of course also revised.

2. Change in Admission Requirements

   The following to be the minimum requirements for admission to the School of Architecture:

   (a) Graduation in an approved course in Arts, Science or Applied Science at this university (or at an approved university) providing:

      i) standing at graduation is at least 60%

      ii) it is expected that a student will have taken the following subjects with a passing or higher grade:

         Mathematics 120, 202
         Physics 102 or 110 and/or
         Chemistry 110

      (or the equivalents at an approved university)

FACULTY OF APPLIED SCIENCE

School of Architecture

2. Change in Admission Requirements (Continued)

(b) Completion of three years of a course leading to a Bachelor's degree in Arts, Science or Applied Science at this University (or at an approved university), providing:

i) an average of 65% has been obtained in the examinations of the last year of the course, or

an average of 65% has been obtained in the combined results of the examinations of the last two years of the course;

ii) the following subjects or their equivalents have been passed successfully:

Mathematics 120, 202
Physics 110, and a second year course in Physics

Beginning in September 1969, graduation in an approved course of studies at an approved university will be mandatory for admission to the School of Architecture.

FACULTY OF ARTS

Anthropology

New course (1969-70)	Anthropology and Sociology 100 (3) Elementary Problems in Anthropological and Sociological Analysis	
Change (1969-70)	200	title and description changed to: Issues in Anthropological Theory and Methods

Asian Studies

New course	400 (3)	Readings in Modern Japanese Prose
	406 (3)	Readings in Japanese Fiction and Drama
	407 (3)	Readings in Pre-Modern Japanese Prose
	408 (3)	Readings in Japanese Poetry, Classical and Modern

(N.B. only two of the above four courses to be given in each year.)

FACULTY OF ARTS

Asian Studies (Continued)

New course	409 (3)	Readings in Classical Chinese Prose (This course to alternate with Asian Studies 417)
	411 (3)	Pre-Modern Chinese Fiction and Drama
	413 (3)	Twentieth Century Chinese Authors
	419 (3)	Readings in Classical Chinese Poetry

(N.B. only two of the above four courses to be given in each year, and the existing Asian Studies 417 to be given in alternate years.)

	414 (3)	Intermediate Sanskrit
Changes	303	title and description changed to Classical Chinese I
	401	title and description changed to Classical Chinese II
Deletions	403	
	404	

Classical Studies

New course	100 (3)	Introduction to Classical Civilization
	310 (3)	Greek and Roman Literature
Changes	315	title and description changed to Classical Epic
	316	title and description changed to Classical Drama
	330	to be renumbered 431
Deletions	332	
	431	
Joint listing	Fine Arts 330 (3) Greek and Roman Art to be taught under Classical Studies	

Economics

New course	333 (3)	French Canada

FACULTY OF ARTS (Continued)

Fine Arts

New courses	434 (3)	Painting and Graphics
	436 (3)	The Theory and Practice of Western Art Criticism
	446 (3)	Understanding of the Visual Arts
Deletion	126	replaced at the senior level by Fine Arts 446

Geography

New course	401 (3)	Introduction to Geographical Problems
Change	445	Divided into two courses:
	345 (1½)	Honours Seminar)
	445 (1½)	Honours Seminar)
Deletion	201	

Italian

New courses	400 (3)	Honours Seminar
	420 (3)	Italian Language and Literature

Linguistics

New courses	410 (3)	Phonetics
	440 (3)	Regional Linguistics

Psychology

Changes	407	unit value changed from (1½) to (1½-3)
	415	title and description changed to: The Psychology of Work

Religious Studies

New courses	411 (3)	Indian and Tibetan Mahayana Buddhism
	413 (3)	Contemporary Buddhist Thought and Practice

FACULTY OF ARTS

Religious Studies (Continued)

Changes	304	title changed to: Religious Thought of the Ancient Near East
	305	title changed to: Religious Thought of Ancient Israel
	407	title and description changed to: Archaeology of the Ancient Near East

Russian

Change	110 (6)	unit value and hours increased

Sociology

New course (1969-70)	Anthropology and Sociology 100 (3) Elementary Problems in Anthropological and Sociological Analysis	
Changes (1969-70)	200 (3)	title and description changed to: Issues in Sociological Theory and Method
Changes (1968-69)	406	divided into two courses
	(406 (1½)	Research Methods
	(407 (1½)	Statistics in Sociology

Spanish

New course	409 (3)	Latin American History
Changes	407	title changed to: Spanish American Literature

(407 and 409 will be given in alternate years)

Amendment to the Requirements of Residence for the B.A. Degree

Students may now include extra courses taken with the permission of an academic advisor in the winter session or the summer session to shorten the requirements of residence following Grade XII.

FACULTY OF ARTS (Continued)

Proposal to allow courses on a "Pass-Fail" basis

That students be permitted to take on a Pass-Fail basis one course (3 units) a year, in subjects not part of their majors or honours field (including prerequisites), and to receive full credit for such a course taken and passed.

FACULTY OF COMMERCE AND BUSINESS ADMINISTRATION

New courses (1968-69)	409	(1½)	City Growth and Structure
New courses (1969-70)	351	(1½)	Income and Other Taxes (Elective)
	472	(1½)	Quantitative Analysis of Financial Decisions
	476	(1½)	Financial Institutions II
New courses (1970-71)	453	(1½)	Financial Accounting - Advanced
Changes (1968-69)	307		title changed to Urban Land Economics
	309		title changed to Real Estate Finance
	324		unit value increased from 1½ to 3, title and description changed
	342		title and description changed
	383		title and description changed
	407		divided into two 1½-unit courses (Commerce 407 (1½) Real Estate Valuation (Commerce 408 (1½) Real Estate Investment Analysis
	446		description changed
Changes	353	(1½)	replaced by 353 (3) Financial Accounting - Intermediate
	354		title and description changed
	356		title and description changed
	372		renumbered 378
	374		renumbered as 379
	375		renumbered as 370
	376		renumbered as 375
	450		title and description changed (now an elective)
	451		title and description changed (now an elective)
	454		title and description changed

FACULTY OF COMMERCE AND BUSINESS ADMINISTRATION (Continued)

Changes (1969-70)	472	renumbered 371 and moved to Third Year
	473	renumbered 374 and moved to Third Year
	474	renumbered 475
	475	renumbered 376 and moved to Third Year title changed to: Financial Institutions I
	476	renumbered 477
Deletion (1969-70)	371	

Curriculum Changes

Accounting (1970-71	455	changed from required to elective

Change of Name of Division

The name of the Division of Estate Management to be changed to Division of Urban Land Economics

FACULTY OF DENTISTRY

Dental Hygiene Programme

Changes to the programme as approved in May, 1967.

201	unit value increased to 4 - now incorporates 202; description also changed
202	deleted-incorporated into 201 above
203	renumbered 202
204	renumbered 203
205	renumbered 204
206	deleted-incorporated into 209 (renumbered 207) below.
207	renumbered 205
208	renumbered 206
209	renumbered 207 - now incorporates 206; unit value increased to 4; description also changed.

FACULTY OF EDUCATION

New courses	401 (1½)	Programmed Instruction
	402 (1½)	The Psychology of Creativity

FACULTY OF EDUCATION (Continued)

For Proposed New Diploma Programme in Education of the Deaf

New Courses

440 (1½-3) Special Study in a Subject-Matter Field
441 (1½) Audiology I
442 (1½) Audiology II
443 (1½) Teaching Communication Skills to the Hearing Impaired
444 (1½) Teaching Academic Subjects to the Deaf
445 (1½) Teaching Speech to the Deaf
446 (1½) History of Education of the Deaf
447 (1½) Psychology of Deafness

General

477 (1½) Remedial Reading - Practical - Special Problems
478 (3) Teaching English as a Second Language
488 (1½) Problems in the Teaching of Elementary School Mathematics

Changes

411 divided into two 1½-unit courses:
(426 (1½) Personal Services in the School
(427 (1½) Guidance

415 divided into three 1½-unit courses of which students will take two:
(472 (1½) Developmental Reading - Theoretical
(473 (1½) Developmental Reading - Elementary Practical
(474 (1½) Developmental Reading - Secondary Practical

423 unit value reduced from 3 to 1½, title and description changed: Principles of Teaching the Hearing-Impaired

462 to be divided into two 1½-unit courses (students to take both):
(475 (1½) Remedial Reading - Theoretical
(476 (1½) Remedial Reading - Practical - General Problems

Elementary Division A-3 programme (P.L.-25 1967-68 Calendar)

Curriculum Changes 1) Students may take either Education 205, 207 and 209 (3 units) or one of Education 305, 307 or 308 (3 units).

FACULTY OF EDUCATION

Elementary Division A-3 Programme (P.L-25 1967-68 Calendar)

Curriculum Changes 2) Education 301 (3 units) to be replaced by Education 310 (1½) and 311 (1½)

Addition of a Remedial Reading Major in the Elementary Division to consist of:

Education 472 and 473	(3)
Education 475 and 476	(3)
English 311	(3)

FACULTY OF FORESTRY

New courses

300 (3)	Principles of Forestry and Wood Sciences
471 (3)	Optimization Techniques in Forestry
485 (1½)	Forest Land Classification

Dropped 161, 251, 465

Changes in Description and/or Number

150 (1½)	Dentrology
250 (1½)	Forest Ecology
272 (2)	Principles of Forest Harvesting
361 (1½)	Forest Surveying
363 (1½)	Principles of Forest Land Management
372 (2)	Analysis of Harvesting Operations
390	number changed from 290
391	number changed from 390
451 (1½)	Fire Control and Use - moved from Second to Fourth Year
463 (1½)	Forest Management
466 (1½)	Advanced Biometrics
481 (3)	Forestry Economics
483 (1½)	Forest Watershed Management
499 (3)	B.S.F. Thesis

Changes in Unit Value

298 (½)	Essay
375 (2½)	Manufacture of Forest Products
398 (1)	Essay
455 (1-3)	Directed Studies in Forestry
480 (1)	Forest History, Policy and Administration

FACULTY OF FORESTRY (Continued)

Curriculum Changes

First Year

Drop	Geog. 214; For. 161
Add	Comp. Sc. 201 Choice of 6-7 units from Chem. 230, Com. 459, Math. 155, Phys. 155, Soc. 200

Second Year

All options:

Drop	For. 250 (for 1968-69 only) For. 251 (moved to Fourth Year) and renumbered Replace Math. 155 with Phys. 155 (Forest Harvesting and Wood Science Options) Replace Chem. 156 with Chem. 200 or 205 in Wood Science option

Third Year

Drop	Engl. 305, For. 352 and For. 355

Fourth Year

Forest Land Management:

Add	Choice of 11 units from: For. 450, 462, 463, 464, 475, 480, 482, 483, 484, 485, 493, 494 (some not available 1968-69)
Drop	For. 465 (incorporated in For. 463)

Forest Business Management:

Add	Choice of 6-7 units from: For. 463, 475, 476, 477, 480
Drop	Com. 468

Forest Harvesting:

Add	Choice of 7 units from: For. 463, 471, 472, 475, 478, 482
Drop	Ag. Mech. 304

FACULTY OF FORESTRY (Continued)

Forest Wildlife Management:

Add	Choice between For. 463 and For. 483; Add For. 494
Drop	For. 464, 480

Silvics:

Add	Choice of 11 units from: Agron. 304, Bot. 425, For. 410, 418, 450, 466, 480, 482, 483, 484, 485; Soil Sc. 313, 416
Drop	Soil Sc. 314

Wood Science:

Add	For. 481 Choice of 9 units from: Ap. Sc. 270 and For. 466, 471, 476, 477, 478, 479
Drop	M.E. 455

(N.B. students in Wood Science will replace For. 391 with 3 units of For. 455).

FACULTY OF GRADUATE STUDIES

Asian Studies

New courses	505 (3)	Topics in the History and Structure of the Japanese Language
	506 (3)	Research Methods and Source Materials in Japanese Studies
	508 (3)	Problems in the History of the Chinese Language
	517 (3)	Research Methods and Source Materials in Chinese Studies
Change	510	title changed to Topics in Chinese Literature

Astronomy (Department of Geophysics)

New courses	561(1-2)	The Basic Data of Astronomy
	562(1-2)	Stellar Spectroscopy and Stellar Atmospheres

FACULTY OF GRADUATE STUDIES

Astronomy (Department of Geophysics) (Continued)

Change	515	(See Geophysics)

Botany (Institute of Oceanography)

Change	512	title and description changed: Practical Marine Phytoplankton Study

Chemical Engineering

New courses	570 (1-3)	Advanced Paper Technology
	571 (1-3)	Non-Newtonian Fluid Behaviour

Chemistry

New courses	514 (1)	Radiation Chemistry
	527 (1)	Photochemistry
Deletion	540	

Civil Engineering

New courses	571 (1)	Steady Flow in Open Channels
	588 (1)	Experimental Soil Mechanics
Changes	563	title and description changed to: Unsteady Flow in Open Channels
	567	description changed
	568	description changed
	590	unit value increased to (1½) - description changed
	592	unit value increased to (1½) - title and description changed: Applications of Physical-Chemical Principles to Clay Behaviour in Soil Engineering

Comparative Literature

New courses	502 (3)	Studies in Literary Movements and Periods
	503 (3)	Studies in Myth, Theme and Tradition
	504 (3)	Topics in Comparative Literature
	505 (3)	New Problems in Comparative Literature
	506 (3)	Studies in Oriental and Occidental Literature
	547 (3-6)	Reading Course

FACULTY OF GRADUATE STUDIES

Comparative Literature (Continued)

Changes	500	title changed to: Introduction to Comparative Literature
	533	renumbered 501; title changed to: Studies in Genre

Education

New courses	510 (3)	The Development of Science Curriculum Materials
	511 (3)	Seminar in Science Education
	527 (3)	Seminar in Library Education
	543 (3)	Historical and Contemporary Aspects of Speech Communication

Electrical Engineering

New courses	555 (1)	Computational Techniques in Systems Optimization and Identification
	575 (1)	Signal Processing
Change	553	description changed

Forestry

New courses	574 (1)	Wood and Pulp Science Seminar
Changes	553	description changed
	562	description changed
deletion	576	

Geology

New course	506 (3)	Structural Geology and Rock Mechanics
Change	545	unit value reduced to 1

Geophysics

New course	See new courses in Astronomy on previous page

FACULTY OF GRADUATE STUDIES

Geophysics (Continued)

Changes	515	name and title changed to: Astronomy 515 Stellar Structure and Evolution - unit value changed
	520	title changed to: Directed Studies in Geophysics and Astronomy

German

Change	516	unit value changed

Mathematics

New course	539 (1-3)	Topics in Functional Analysis
Changes in Title	501	Measure Theory and Integration
	504	Algebraic Geometry
	505	Ordinary Differential Equations
	506	Partial Differential Equations
	507	Number Theory
	511	Algebraic Topology
	513	Topological Groups
	516	Harmonic Analysis
	517	Complex Analysis
	522	Geometric Topology
	525	Fluid Mechanics
	534	Topics in Applied Mathematics

Mechanical Engineering

New course	586 (1½)	Turbulent Shear Flow

Metallurgy

New course	556 (1)	Metallurgical Applications of Fused Salts

Microbiology

New course	509 (3)	Viral Ecology
Changes	502	unit value reduced to 1½
	503	unit value reduced to 1½
	505	title changed to Molecular Microbiology and unit value reduced to 1½
	506	title and description changed: Microbiological Research Procedures I
	507	title and description changed: Microbiological Research Procedures II

FACULTY OF GRADUATE STUDIES (Continued)

Oceanography

New course	508 (1)	Air/Sea Transfer Processes
Changes	506	title and description changed to: Marine Phytoplankton
		Botany 512 - change given under Botany

Physics

New course	571 (1)	Cosmic Physics
Deletions	560, 561, 562	

Planning

New courses	507 (1½)	Environmental Quality Planning
	508 (1½)	Advanced Planning Analysis II
Changes	510	unit value changed from (2) to (1-3)
	511	unit value increased from (1) to (1½)
	521	unit value changed from (1½) to (1-3)
	549	unit value changed from (3) to (3-6)

Slavonic Studies

New courses	542 (3)	Comparative Slavic Literature

Sociology

New Seminar courses
All (1-3)

A. Theory and Research

503, 504

B. Relationships Between Individuals and Groups

513, 514

C. Elements of Social Organization

523, 524

D. Institutional Areas

534, 535

FACULTY OF GRADUATE STUDIES

Sociology (Continued)

Change 540 unit value changed from (1) to (1-3)

Relationships between Individuals and Groups

Add topics: Deviance, Ethnomethodology

D. Institutional Areas

Add topic: Sociology of Knowledge

Change in General Regulations Governing the Degrees of Ph.D. and Ed.D.

"Courses for Credit" (P.0-9, 1967 Calendar)

"Certain courses numbered 300 or above in related subjects as approved in particular cases on the recommendation of the department in which the candidate is registered."

(This had previously referred to 400 level courses.)

SCHOOL OF HOME ECONOMICS

Changes	203 (3)	divided into two 1½-unit courses: 203, 205
	305 (3)	divided into two 1½-unit courses: 305, 405
	405 (1½)	revised as 407 (1½)
	407 (1½)	replaced by 301 (1½)
	222	renumbered as 322

FACULTY OF LAW

Introduction of a deposit fee system on first admission.

FACULTY OF MEDICINE

Physiology

New course	421 (1½)	Advanced Topics in Renal and Respiratory Physiology
	422 (1½)	Advanced Topics in Cardiovascular Physiology
	423 (1½)	Advanced Topics in Gastrointestinal Physiology
	424 (1½)	Advanced Topics in Endocrinology and Systems Analysis

FACULTY OF MEDICINE

Physiology (Continued)

Existing Course	425	(1½)	Neurophysiology. Anatomy 425 must be taken concurrently (already listed in Medicine Calendar)
New courses	426	(1½)	Advanced Topics in Neurophysiology
	431	(1½)	Advanced Laboratory in Renal and Respiratory Physiology
	432	(1½)	Advanced Laboratory in Cardiovascular Physiology
	433	(1½)	Advanced Laboratory in Gastrointestinal Physiology
	434	(1½)	Advanced Laboratory in Endocrinology
Changes	440		unit value increased from 1 to 1½
	510		to be replaced by Physiology 425 and 426
Deletion	401		

SCHOOL OF NURSING

New courses	*189		Fieldwork
	281	(1)	Introduction to Statistics and Research Methods in Nursing
	*289		Fieldwork
	366	(3)	Clinical Nursing
	*389		Fieldwork
Changes	150		title and description changed to: Human Behaviour
	167		renumbered 267 and moved to Second Year
	202		title changed to: Principles of Learning and instruction
	252		title changed to: Human Behaviour
	280		unit value reduced from 10 to 8. Course to commence on regular first day of lectures
	326		unit value decreased from 8 to 7
	356		unit value increased from 2 to 3; title and description changed: Perspectives in Nursing
	382		description changed
	384		description changed
	386		description changed
	458		unit value increased from 2 to 3
	*483		number changed to 489

SCHOOL OF NURSING

Changes (Continued)

* Note: No unit value content for fieldwork courses is assigned, in line with existing practices, and represents dropping summer term credits in First and Third Years.

Deletions	157	390	395
	167	392	450/483
	363	394	485

Courses in other Faculties

Recommendations concerning courses in Social Sciences

1. That the unit requirement in Social Science in the baccalaureate programme be reduced from 12 to 9 units and that students be permitted to select one of a variety of approved three-course options in the Department of Anthropology and Sociology and Psychology.

2. That students be permitted to choose Anthropology 200 in lieu of Sociology 200 in the Nursing C programme.

3. That Anthropology 200 be required in lieu of Psychology 206 in the Nursing E programme.

Clinical Courses for Summer 1968.

157 and 395 - unit values to be deleted for the summer (1968). (These courses to be deleted in the 1968-69 Calendar).

FACULTY OF PHARMACY

Course changes	220	renumbered 325 and moved to Third Year
	340	laboratory hours increased
	411	hours reduced by one hour a week to a 3-hour laboratory

FACULTY OF PHARMACY (Continued)

Curriculum changes	1.	That the "non-science elective" in the first and fourth years be changed to "elective".
	2.	Second Year - Economics 200 to be an elective not a required course.
	3.	Third Year - the words "or an elective" to be added after English 305.
	4.	Commerce ~~262~~ 369 (3) a new course in Marketing to be substituted for Commerce 261 (now reduced to two units).

SCHOOL OF PHYSICAL EDUCATION

New course	380 (1½)	History of Physical Education and Recreation
Changes	360	description changed
	230 (½) and 232 (½)	combined to make 1 unit course 230

FACULTY OF SCIENCE

Biology

new course	335 (3)	Fundamental Genetics (Summer Session only)

Chemistry

Changes	220	description changed
	403	unit value reduced to (2); laboratory portion split off to form: 423 (1) Advanced Organic Chemistry Laboratory
	407	unit value reduced to (2); laboratory portion split off to form: 427 (1) Advanced Physical Chemistry Laboratory
	415 (2)	Practical Chemistry Laboratory (new integrated laboratory course for students enrolled concurrently in Chemistry 403, 407 and 412)
	449	title and description revised: Seminar and Thesis

FACULTY OF SCIENCE (Continued)

Computing Centre

New course	210 (3)	Algorithms and Programming
Change	200	title and description changed: Introduction to Computers

Geology

Changes	204	title and description changed: Introduction to Stratigraphy and Structural Geology
	210	title and description changed: Mineralogy-Fundamentals of Crystal Chemistry as Applied to Minerals
(1969-70)	401	title and description changed: Advanced Structure and Stratigraphy

Geophysics

New courses

Astronomy	420 (3)	Review of Modern Astronomy
Astronomy	421 (3)	Principles of Modern Astronomy

Major Programme in Astronomy

Proposal to change name of Astronomy courses to Astronomy XXX rather than Geophysics XXX. Geophysics 200, 320 and 321 would become Astronomy 200, 320 and 321.

Mathematics

New courses	311 (1½)	Mathematical Methods for Business Decisions II
	312 (1½)	Mathematical Methods for Business Decisions II
Change		Deletion of paragraph on "Advanced Placement" (P.T-67 and T-68, 1967 Calendar).

Microbiology

New course	323 (3)	Bacterial Cytology, Growth and Genetics
Changes	200	description revised
	301	replaced by new 1½-unit course (reduction in unit value) 321 (1½) Quantitative Microbiology

FACULTY OF SCIENCE

Microbiology (Continued)

Changes	306 and 311	replaced by new 1½-unit course (reduction in unit value)
	322 (1½)	Soil and Aquatic Microbiology
	307	description changed
	402	unit value reduced to 1½; title and description changed: Immunology
	403	unit value reduced to 1½; title and description changed: Pathogenic Bacteria and Rickettsiae
	405	increase in laboratory hours; title and description changed: Bacterial Physiology
	411	description changed

Revised Majors Programme in Microbiology

Revised Honours Programme in Microbiology

Physics

New courses	316 (3)	Particle Mechanics
Changes	301 and	honours section of 308 - laboratory portion split off to form separate courses
		309 (1) Honours Electrical Laboratory
		310 (1) Honours Optics Laboratory
	300/303 and	non-honours section of 308 - laboratory portion split off to form separate courses: 318 and 319
	300	description revised: Electricity and Magnetism (2)
		318 (1) Optics Laboratory
		319 (1) Electricity Laboratory
	326	title and description changed: Optics, Vibrations and Acoustics
Deletion	420	
Curriculum changes	Requirements of third year honours and majors programmes revised incorporating above changes.	

FACULTY OF SCIENCE (Continued)

Physiology

New courses	421 (1½)	Advanced Topics in Renal Physiology
	422 (1½)	Advanced Topics in Cardiovascular and Respiratory Physiology
	423 (1½)	Advanced Topics in Gastrointestinal Physiology
1969-70 & alt. years	424 (1½)	Advanced Topics in Endocrinology and Systems Analysis
NOT NEW	425 (1½)	Neurophysiology
New courses	426 (1½)	Advanced Topics in Neurophysiology
	431 (1½)	Advanced Laboratory in Renal Physiology
	432 (1½)	Advanced Laboratory in Cardiovascular and Respiratory Physiology
	433 (1½)	Advanced Laboratory in Gastrointestinal Physiology
	434 (1½)	Advanced Laboratory in Endocrinology
Changes	510	to be replaced by 425 and 426 renumbered only
	440	unit value increased to 1½
Deletion	401	

Revised requirements for Honours Programme in Physiology

Revised requirements for Combined Honours Physiology for the B.Sc.-M.D. Programme

Additions to list of courses acceptable from other faculties:

Agricultural Mechanics 300	(1½)	Dairying 301	(3)
Agricultural Mechanics 301	(1½)	Dairying 406	(1½)
Agricultural Mechanics 401	(3)	Plant Science 406	(3)
		Poultry Science 306	(1½)