Wednesday, December 15, 1971.

The fourth regular meeting of the Senate of The University of British Columbia for the session 1971-72 was held on Wednesday, December 15, 1971, at 8.00 p.m. in the Board and Senate Room, Administration Building.

Present: President W. H. Gage (Chairman), Dr. A. E. Aho, Mr. D. V. Anderson, Dr. C. S. Belshaw, Mr. D. M. Brousson, Dr. T. H. Brown, Mr. P. T. Burns, Mr. F. J. Cairnie, Dr. S. D. Cavers, Dr. J. D. Chapman, Dr. D. H. Chitty, Dr. R. M. Clark, Dean I. McT. Cowan, Rev. R. W. Finn, Dean W. D. Finn, Mr. A. C. L. Fox, The Hon. E. D. Fulton, Dean J. A. F. Gardner, Mr. S. E. Garrod, Mr. W. Gerson, Dr. R. F. Gray, Dr. D. F. Hardwick, Mr. G. H. D. Hobbs, Mr. R. W. Jacobs, Dr. J. M. Kennedy, Dean D. T. Kenny, Mrs. J. MacD. Lecky, Dean S. W. Leung, Dean A. J. McClean, Dean J. F. McCreary, Dr. C. A. McDowell, Dr. M. F. McGregor, Dr. L. G. Mitten, Dr. B. N. Moyls, Dr. J. M. Norris, Mr. R. F. Osborne, Dr. P. H. Pearse, Mrs. A. Brearley Piternick, Mr. P. Plant, Dr. R. A. Restrepo, Dean B. E. Riedel, Mr. A. R. Robbins, Mr. J. V. Rogers, Dr. R. F. Scagel, Mr. G. R. Selman, Dr. R. F. Sharp, Dr. J. H. G. Smith, Dr. J. K. Stager, Mr. B. Stuart-Stubbs, Mr. J. T. Sydor, Dr. H. V. Warren, Dr. B. L. White, Dean P. H. White.

Observers: Mr. J. A. Banham, Dr. E. MacPherson, Mr. P. Thompson.

Messages of regret for their inability to attend were received from: Chancellor A. M. McGavin, Deputy President W. M. Armstrong, Mr. S. Black, Rev. J. Blewett, Dr. C. A. Brockley, Mr. C. M. Campbell Jr., Dr. M. F. Clarke, Mr. C. J. Connaghan, Dr. S. M. Friedman, Dr. W. C. Gibson, Mr. J. Guthrie, Mrs. W. T. Lane, Dr. P. A. Larkin, Mr. S. S. Lefeaux, Mr. A. J. Longmore, Mr. K. R. Martin, Mr. D. F. Miller, Dean N. V. Scarfe, Dean M. Shaw, Dr. G. M. Volkoff, Dr. W. A. Webber, Dr. W. D. Young.

Minutes of the previous Meeting

Dr. Hardwick)
Dean Riedel)

That the Minutes of the third regular meeting of Senate for the session 1971-72 having been circulated, be taken as read and adopted.

Carried

Wednesday, December 15, 1971.

Business arising from the Minutes

At the November 17, 1971 meeting of Senate Dr. Restrepo had given notice of motion.

Dr. Restrepo)
Mr. Fox)

That a committee be established to consider the relationship between existing physical plant and architectural planning on this campus and the academic functions of the University; the membership of this committee to include at least two students, an architect and a person familiar with community organization.

Dr. Restrepo explained that the intent of the motion was to initiate a set of procedures which would eventually lead to the establishment of a better campus for the University.

He stated that the present campus was aesthetically and architecturally a disaster and that all the shortcomings on the campus could not be blamed on the lack of adequate financial support.

Criticism was expressed at the existence of a net of roadways on campus that were built at great expense and the subsequent arrangements preventing people from using them.

Students from the Applied Science - Agricultural Sciences - Forestry complex at the South end of the campus did not have adequate eating facilities near their buildings. It was also impossible for them to attend noon-hour lectures, concerts and other functions without being late for their classes at the South end of campus. The effectiveness of programmes for co-operation in teaching between the Department of Mathematics and the Faculty of Applied Science was undermined by the tremendous physical separation, and instructors were becoming increasingly unwilling to teach courses so far removed from their offices.

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Business arising from the Minutes (continued)

The present building programmes by their lack of concern with aesthetics were destroying a great deal of the goodwill that the University had in the past enjoyed from its students, members of Faculty and the public. A strong case would have to be made on the competence of the University to manage its resources wisely as it makes further appeals for public support. Previous attempts to draw up grandiose plans had failed because the Architects had been given the impossible task of planning for a client which did not know its own academic goals. The University should look at its own physical plant critically and constructively, and similarly look at the current existing plans for new construction.

It was felt that this task should not be given to existing committees who for a variety of reasons had been unable to look at the long-range implications of building programmes but to a new group of people who might have a new imaginative approach.

Some members felt that the objectives of the motion could well be accomplished by existing committees. A query was raised as to the relationship between this proposal and the committees that already existed to do the job. It was stated that the Liaison Committee on Planning Permanent Buildings was still in existence but that it was concerned mainly with the siting of buildings.

It was felt that a new committee could look into other matters such as how to alleviate some of the problems created by the present architectural form and how well the present structure is likely to

Business arising from the Minutes (continued)

serve what we think are the University's future needs.

Following further debate the motion was put and carried.

From the Board of Governors

Notification of approval in principle of Senate recommendations - subject, were applicable, to the proviso that none of the programmes be implemented without formal reference to the President and the formal agreement of the President; and that the Deans and Heads concerned with new programmes be asked to indicate the space requirements, if any, of such new programmes.

(i) Philosophy 410 to be offered by correspondence as recommended by the Faculty of Arts. (P.5507)

(ii) Extra-sessional course, Commerce 459, to be offered by the Faculty of Commerce and Business Administration. (P.5507)

(iii) Recommendation of the Faculty of Medicine that the name of the Department of Radiology be changed to "Department of Diagnostic Radiology". (P.5508)

(iv) Revision of Calendar statement concerning admission requirements as recommended by the School of Nursing. (P.5509)

Committee on Prizes, Scholarships and Bursaries

Dean McCreary)
Dean Gardner)

That the new award listed in Appendix 'A' be accepted subject to the approval of the Board of Governors, and that a letter of thanks be sent to the donor.

Carried

Reports of Committees of Senate

Curriculum Committee

Dr. Norris presented the report of the Committee on items referred to it at the September 15 and November 17, 1971 Senate meetings.

Dr. Norris)
Dean Cowan)

That new courses and course changes in Education, recommended by the Faculty of Graduate Studies and outlined on page 5483, be approved.

Carried

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Reports of Committees of Senate

Curriculum Committee (continued)

Dr. Norris)
Dr. Cavers) *That new courses and course changes in Agricultural Economics and Animal Science, recommended by the Faculty of Agricultural Sciences and outlined on page 5511, be approved.*

Carried

Dr. Norris)
Dr. Smith) *That course changes in Poultry Science and Soil Science, recommended by the Faculty of Agricultural Sciences and outlined on page 5511, be approved.*

Carried

As recommended by the Curriculum Committee, Senate agreed to the changes in regulations proposed by the Faculty of Agricultural Sciences concerning Veterinary Medicine and the Departmental Research Project as outlined on page 5511 of the Senate minutes.

Dr. Norris)
Dr. Gray) *That course changes recommended by the Faculty of Education, outlined on page 5512, be approved.*

Carried

Dr. Norris referred to three programme expansions proposed by the Elementary Division of the Faculty of Education. (See page 5512 Senate minutes.) The Committee had studied the proposals but felt that they should have been referred to the New Programmes Committee.

Dr. Norris)
Dr. Cavers) *That the proposals of the Faculty of Education concerning programme expansions be referred to the New Programmes Committee.*

Carried

Dr. Norris)
Dean White) *That new courses in Commerce and Business Administration, recommended by the Faculty of Graduate Studies and outlined on page 5512, be approved.*

Carried

Approval of the proposed change in unit value of Planning 520 was postponed.

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Reports of Committees of Senate

Curriculum Committee (continued)

Dr. Norris)
Dean McCreary) *That the proposed change in unit value of Planning 522 and the proposed new courses in Creative Writing, Surgery and Physical Education and Recreation, recommended by the Faculty of Graduate Studies and outlined on page 5513, be approved.*

Carried

Dr. Norris)
Dean Cowan) *That course proposals in Oceanography, recommended by the Faculty of Graduate Studies and outlined in Appendix 'B' page 5544 be approved.*

Carried

New Programmes Committee

Proposal to offer an M.F.A. degree in Theatre

Dr. Belshaw presented the report of the Committee. The Committee noted that the Master of Fine Arts degree title appeared to be suitable for the type of programme envisaged by the Department of Theatre, but that the designation of degrees is currently under review. It was also noted that the programmes of study are already undertaken in the Master of Arts programme so that the proposal was merely a change in definition and visibility.

Dr. Belshaw)
Dr. Moyls) *That Senate approve the offering of a Master's programme in stage direction and in scene and costume design by the Department of Theatre, and that the title of the degree awarded for this programme be Master of Fine Arts pending the completion of the review of the titling of all Master's degrees at this University.*

Carried

Proposal to offer a Ph.D. degree in Religious Studies (Buddhist Studies)

It was reported that the Department of Religious Studies had a highly respected faculty in the field of Buddhist Studies relating

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Reports of Committees of Senate

New Programmes Committee

Proposal to offer a Ph.D. degree in Religious Studies (Buddhist Studies) - (continued)

particularly to Buddhism in Japan, China and Tibet. The faculty had excellent library resources and were in a good position to offer the Ph.D. degree.

Dr. Belshaw)
Dean Cowan) *That Senate approve the proposed programme and the award of the Ph.D. degree in Religious Studies (Buddhist Studies).*

Carried

Preliminary draft of criteria for priority categories

A draft proposal for use in assigning priority to proposals referred by Senate to the New Programmes Committee had been circulated. The proposal listed three criteria - Academic Significance, Timing and Resources. Dr. Belshaw explained that the concept of resources was a broad one and included present faculty, new faculty, equipment and library facilities that would be required.

The Committee had been charged to bring to Senate priorities relating to the programmes discussed. The intention was to present to Senate at some future date a listing of the proposals referred to the Committee during the year indicating in the short form outlined in the proposal those areas which applied to implementation.

The proposal had not been adopted by the Committee but was brought before Senate for information and to enable members to comment.

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Report of Committees of Senate

New Programmes Committee

Preliminary draft of criteria for priority categories (continued)

It was suggested that the criteria should also indicate to what extent programmes were being duplicated at other universities in the Province.

A further suggestion was made that the Committee should draw up a set of questions so that information would be available on the current and capital expenditure, and what the increases were likely to be not just in the first year but when a programme became fully effective.

Dr. Belshaw stated that a process was already in development and a list of questions had been prepared which requested information concerning what competition there would be with programmes administered elsewhere in the University or neighbouring universities; what increase in support staff would be required; and what would be the overall change in budget at current salaries etc.

Another suggestion was that the Committee should consider giving an element of priority to new programme proposals which contained the suggestion that an old programme would be either abolished or reduced.

Nominating Committee

Recommendations for student membership on Senate committees were as follows:

Wednesday, December 15, 1971.

Reports of Committees of Senate

Nominating Committee (continued)

Agenda Committee	-	A. C. L. Fox
Curriculum Committee	-	D. V. Anderson
New Programmes Committee	-	J. T. Sydor

Dr. Cavers)
Dean Finn)

That the recommendations of the Nominating Committee be approved.

Carried

Proposals of the Faculties

The Agenda Committee recommended that items in Category (a) - new courses or substantial changes - be referred to the Senate Curriculum Committee or to the New Programmes Committee, as appropriate, and that items in Category (b) - minor changes - be passed by Senate in an omnibus motion, with the exception of those items questionned by Senate.

Faculty of Agricultural Sciences (See Appendix 'B')

It was agreed that the proposals for new courses and course changes were all in Category (a) and were therefore referred to the Senate Curriculum Committee.

Faculty of Applied Science (See Appendix 'B')

New courses, course and curriculum proposals were referred to the Senate Curriculum Committee with the exception of proposals in Category (b). It was pointed out that the change in Physics 459 was not a minor one and this recommendation was transferred to Category (a).

It was suggested that the New Programmes Committee should examine the proposed changes in the undergraduate programme of the Department

Wednesday, December 15, 1971.

Proposals of the Faculties

Faculty of Applied Science (See Appendix 'B') - (continued)

of Metallurgy. However, following a brief discussion it was agreed that these should come under Category (a) and be examined by the Senate Curriculum Committee.

School of Architecture (See Appendix 'B')

Proposed changes in the Calendar statement were referred to the Senate Curriculum Committee.

Faculty of Arts

(i) Extra-sessional courses (See Appendix 'B')

Dean Kenny)
Dr. McGregor) *That the proposal of the Faculty of Arts to offer extra-sessional courses from May - July 1972 be approved.*

Carried

(ii) New courses, course and curriculum changes (See Appendix 'B')

Course proposals were referred to the Senate Curriculum Committee with the exception of items in Category (b).

(iii) Proposed new programmes - Bachelor of Music with a major in opera - Bachelor of Music with a major in sacred music

It was agreed that these proposals be referred to the New Programmes Committee.

Faculty of Commerce and Business Administration (See Appendix 'B')

Proposed course changes were listed in Category (b).

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Proposals of the Faculties (continued)

Faculty of Dentistry

Dean Leung)
Dr. Hardwick) *That Health Care and Epidemiology 400 be made elective; bringing it into line with the current status of the course as it applies to medical students.*

Carried

Faculty of Education

(i) Diploma Programme in Counselling

The Faculty recommended that the number of units required for the Diploma Programme in Counselling be reduced to conform with other diploma programmes.

Dr. Gray)
Mr. Osborne) *That the proposal to reduce the number of units required for the Diploma Programme in Counselling from 30 to 24 be approved.*

Carried

(ii) New courses, course and curriculum changes - Elementary Division (See Appendix 'B')

The proposals were referred to the Senate Curriculum Committee and it was agreed that the following courses be changed from Category (b) to Category (a): Education 472, 473, 474, 475, 476, 477, 487 and Social Studies 302.

A query was raised concerning the phrase "approaches to non-grading" in the description of Education 487. It was explained that this referred to the question of dispensing with Grades 1 to 7 and the problems arising from this trend.

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Proposals of the Faculties

Faculty of Education (continued)

(iii) Proposed course and curriculum changes - Secondary Division (See Appendix 'B')

These proposals were listed in Category (b) with the exception of page 1 of the submission concerning Social Studies which was referred to the New Programmes Committee.

Faculty of Forestry (See Appendix 'B')

Proposed calendar changes were referred to the Senate Curriculum Committee with the exception of proposals in Category (b).

Faculty of Graduate Studies (See Appendix 'B')

Proposals for new courses, course and curriculum changes were referred to the Senate Curriculum Committee with the exception of proposals in Category (b). It was agreed that Mechanical Engineering 575 be changed from Category (b) to Category (a).

Attention was also drawn to Mechanical Engineering 576 and 577. It was stated that these were similar to other courses being given on campus and in the case of 576 this did not appear to be of graduate course calibre.

Faculty of Law (See Appendix 'B')

The proposed course changes were listed in Category (b).

School of Nursing (See Appendix 'B')

Dean McCreary)
Dr. Cavers) *That the proposal of the School of Nursing to offer extra-sessional courses from May - July 1972 be approved.*

Carried

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Proposals of the Faculties (continued)

Faculty of Pharmaceutical Sciences

Promotion requirements and additional regulations for supplemental examinations

Dean Riedel explained that the Faculty proposed to establish a new standard of promotion. Students would be promoted only if they passed all required courses with an average of 60%. A student not fulfilling the requirements might raise his standing through supplemental examinations.

Dean Riedel)
Dr. Brown)
That the proposal to raise promotion requirements and to introduce additional regulations for supplemental examinations be approved.

The Chairman asked what would happen to a student who failed the supplemental. Dean Riedel explained that it was the student's average which counted and if he failed the supplemental he would have to repeat the required courses of that year. It was pointed out that the majority of courses in each year of the Pharmaceutical Science programme were required courses.

The Chairman was concerned that too many different regulations among the various Faculties would cause confusion.

Dr. Scagel stated that in response to a suggestion by Senate the Faculty of Science had examined their promotion policies some time ago and had submitted a proposal to Senate. This had been referred to a committee and the Faculty were still awaiting action on the proposals.

Following further discussion it was agreed that the proposals

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Proposals of the Faculties

Faculty of Pharmaceutical Sciences

Promotion requirements and additional regulations for supplemental examinations (continued)

of the Faculty of Pharmaceutical Sciences and the Faculty of Science be brought back to the next meeting of Senate for further discussion.

School of Physical Education and Recreation (See Appendix 'B')

Proposals for new courses were referred to the Senate Curriculum Committee.

Faculty of Science

(i) Extra-sessional courses (See Appendix 'B')

Dr. Scagel)
Dr. Moyls) *That the proposal of the Faculty of Science to offer extra-sessional courses from May - July 1972 be approved.*

Carried

(ii) New courses, course and curriculum proposals (See Appendix 'B')

It was agreed that the proposals be referred to the Senate Curriculum Committee with the exception of those courses listed in Category (b).

All Faculties

Dr. Norris)
Dean Gardner) *That the course and curriculum proposals of the Faculties listed as Category (b) in Appendix 'B' be approved.*

Carried

Annual Report of the Centre for Continuing Education 1970-71

Mr. Selman commented on the report. He stated that this was

Annual Report of the Centre for Continuing Education 1970-71 (continued)

the first year in which the Centre had operated under its new name and with its new organizational relationships. The Council for the Centre was operational and it was hoped to get increasingly effective advice from the Council about the development of programmes. The President's Co-ordinating Committee on Continuing Education was now engaged in a study of the financing of continuing education on campus.

Registration was approximately the same as in the previous year. During the past year about 3,300 students registered for the 165 credit courses offered by the Faculties through the Centre. Approximately 450 non-credit courses were offered with a registration figure of about 17,500 students. The non-credit courses were equally divided between courses in the professions and courses in the field of general or liberal education. Consultations were taking place with other institutions, universities and colleges in the Province in order to co-ordinate programming efforts.

The Centre had become more directly involved in the work of the Indian Education Resources Centre on campus which was doing significant work with respect to the role of young Indians in the field of education.

Mr. Selman referred to the Summer Language Institute which is teaching both English and French as second languages to young students.

One area particularly in need of development was that of courses for credit towards a degree which might be taken by part-time students

in the evening. It was hoped that the Senate committee now studying this would recommend more adequate provision of courses in this area. It was felt that in this respect the Centre's programme fell short of what the community needed and expected from the University.

The Centre had worked more closely this year with Departments and Faculties in planning programmes and appreciated the co-operation and assistance extended to it by administrators and faculty members.

Concern was expressed at the growing number of part-time students at the University. Comments were requested on the significance of the decline over a three year period in the number of on-campus short courses and credit correspondence courses. Mr. Selman stated that the figure for on-campus short courses in 1968-69 had been unusually high and was not typical. Also there was an increasing difficulty in holding short courses on campus because of the lack of space. With respect to credit correspondence courses it was stated that the Faculties were moving towards Third and Fourth Year levels since the Colleges were now making available First and Second Year courses, and this had affected the demand.

It was suggested that there should be a slight change of emphasis in the Centre's programme. Course offerings listed in the report showed a greater weight of courses concerning distributing wealth rather than creating wealth. It was felt that there should be more emphasis on production and a little less on distribution.

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Annual Report of the Centre for Continuing Education 1970-71 (continued)

Attention was drawn to a reference in the report to the possible development in the coming year of a downtown centre for continuing education. It was explained that the Centre had in mind the establishment of an off-campus location for the convenience of people taking their evening courses. Concern was expressed at the development of a downtown centre which would be a college under a different name and could have unfortunate consequences unless there were a close relationship with colleges operating in the same field. It was agreed that there would have to be close consultation with other institutions if the idea of an off-campus centre were developed.

In answer to a query concerning the statistical information contained on page 43 of the report it was stated that there was a large number of part-time students at the University which was not reflected in the figures shown because they did not take part in programmes administered by the Centre.

Report on Registration 1971-72

The report on registration for 1971-72 was circulated for information. Total enrolment for the Winter Session was 19,826 compared to 20,937 in 1970-71.

It was agreed that in future reports Summer Session enrolment figures be included in order to reflect the total number of students admitted in the year.

Correspondence

Letters of thanks were received from the following persons who had

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Correspondence (continued)

been granted emeritus status by Senate:

Miss S. M. Boyles; Miss M. Cottingham; Dean G. F. Curtis;
Miss S. M. Deyell; Dr. C. E. Dolman; Miss E. E. Harris;
Dean V. J. Okulitch; Dr. C. E. Smith; Mr. J. E. Smith.

Other Business

Dr. Hardwick asked if the Academic Planner had any information concerning apparently obsolete courses; ones with minimum enrolment; old programmes and potential duplication of courses at this University and courses offered at other universities in the area. Dr. Clark requested that Dr. Hardwick put his questions in writing and he would see what could be put before Senate.

The meeting adjourned at 10.00 p.m.

The next regular meeting of Senate will be held on Wednesday, January 19, 1972.

Secretary

Confirmed,

Chairman

Wednesday, December 15, 1971.

APPENDIX 'A'

New Award Recommended to Senate

The Cattermole-Trethewey Bursary

A bursary, the gift of Robert Kenny, is offered to students in Forestry. An award of $150 will be available in each of the sessions 1972-73, 1973-74, 1974-75. The award will be made to a deserving undergraduate beginning or continuing studies in the Faculty of Forestry.

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APPENDIX 'B'

Course and Curriculum Changes

(a) = new courses or substantial changes

(b) = minor changes

FACULTY OF AGRICULTURAL SCIENCES

Agricultural Sciences

(a)	Changes	101 and 201 change in title and description

Soil Science

(a)	New courses	300 (1½) Soil and Man I 301 (1½) Soil and Man II

FACULTY OF APPLIED SCIENCE

Chemical Engineering

(b)	Deletion	398

Civil Engineering

(b)	Changes	C.E. 356 change in description C.E. 373 change in description and unit value C.E. 367 change in description Diploma course in surveying - change in prerequisites Fourth Year Surveying Option - change in electives

Electrical Engineering

(b)	Deletions	EE 479 and 481
	Changes	EE 477 change in description EE 483 change in contents and description EE 485 change in description

Engineering Physics

(a)	Changes	Physics 459 change in content and description
	(b)	Changes in Fourth Year Oceanography option - delete Oceanography 401

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF APPLIED SCIENCE

Engineering Physics (continued)

(b) Changes in programme for Third and Fourth Years - add EE.366; delete EE.363 and 465

Geological Engineering

(b)	Changes	Second Year	- add Ap.Sc. 281 and Geol. 206 delete Geol. 304
		Third Year	- add Geol. 304 delete Math. 251, Min. 351, Ap.Sc. 251, Min.350, Geol. 203,
			Ap.Sc. 281 will not be given in Third Year after 1972-73
		Fourth Year	- add C.E. 473, E.E. 366, Geol. 203; delete Min. 350

Mechanical Engineering

(b)	Changes	Ap.Sc. 275 change in course content
	Deletions	M.E. 154 and M.E. 492
		Third Year - add E.E. 365, E.E. 370, delete E.E. 351
		Fourth Year - delete E.E. 465, Math. 450
(a)	New course	M.E. 470 (1½) Experiemental Stress Analysis
(a)	Changes	M.E. 363, 463, 465, 468 change in descriptions M.E. 467 change in unit value and hours M.E. 469 to be offered in second term
	Deletion	M.E. 478

Metallurgy

(a)	Changes	Second and Third Year Metallurgy re-arranged.
		Second Year programme to consist of a core of 15½ units, four of which may be chemistry courses or mechanics courses. Students

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF APPLIED SCIENCE

Metallurgy

(a) Changes (continued)

required to take 3 units of electives. Change Ap.Sc. 270 and 275 from required courses for all Metallurgy students. Add Chem. 253 and 257 to Metallurgy curriculum for students who wish to emphasize extractive or process metallurgy. Incorporate not less than 3 units of electives in the Metallurgy curriculum.

Third Year - change M.E. 367 from a required course to a preferred elective. Change Min. 371 from a required course to a preferred elective with new unit value, (1½) instead of (2).

Third Year - Increase physical metallurgy content of the core by adding one unit. Add two new courses (Met.377 and 383) and E.E. 370 as preferred electives.

(a) New courses

Metallurgy	370	(2)	Structure of Metals I
	376	(2)	Physical Metallurgy
	377	(1)	Welding and Joining
	383	(2)	Ceramic Processing
	470	(2)	Structure of Metals (II)
Mining	371	(1)	Principles of Mineral Processing

Mineral Engineering

(b) Changes

Third Year Mineral Engineering curriculum - add Geol. 354; delete Math. 251.

SCHOOL OF ARCHITECTURE

(b) Changes

305 change in title, description & unit value
400 change in description and unit value
401 change in description and unit value
411 change in title
420 change in unit value and description
421 change in unit value and description

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APPENDIX 'B'

Course and Curriculum Changes

SCHOOL OF ARCHITECTURE

(b) Changes (continued)

433 change in title
434 change in title
440 change in title, description and unit value
441 change in title and unit value
444 change in title
455 change in title
460 change in description

FACULTY OF ARTS

Extra-sessional courses May-July 1972

Anthropology	330	Peasants in the Third World - Directed Study Abroad, Mexico and Cuba
	402	Comparative Ethnography of a Special Area (S.E. Asia)
	412	Introduction to Anthropological Problems
Asian Studies	345	Indian Literature in Translation
Economics	200	Principles of Economics
	490	Applied Economics
English	200	Literature and Composition
	303	English Composition
	321	Approaches to Poetry
	360	Sixteenth-Century Survey to 1611
	440	Canadian Literature
	450	A survey of American Literature
Fine Arts	497	Directed Study Abroad - Italy
History	329	The Social Development of Canada
Linguistics	300	Advanced Studies in Linguistics
Philosophy	410	Philosophical Problems
Political Science	204	International Relations
Psychology	100	Introductory Psychology
	200	Experimental Psychology
	316	Methods in Research
	409	Cognitive Processes
	413	Sensation and Perception
Sociology	361	Social Stratification
	412	Introduction to Sociological Problems

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF ARTS (continued)

Anthropology & Sociology

(a)	New Courses	Anthropology	305	(3)	Theory in Archaeology
			410	(3)	PreHistory of a Special Area
		Sociology	210	(3)	Canadian Social Issues
			220	(3)	Sociology of Life-Styles
			270	(3)	Introduction to Comparative Social Institutions
			320	(3)	Studies in Mass Society
			410	(3)	Applied Sociology
			420	(3)	Sociology of Modernization
			430	(3)	Visual Sociology

(b)	Changes	Sociology	260 change in description
			353 now 453 change in number, title and description
			362 change in description
			363 now 468 change in number
			468 now 363 change in number
			475 change in title and description
	Deletions	Sociology	200, 357, 400, 467, 469, 412

Classics

(a)	New courses	Classical Studies	332	(3)	The Roman Republic
			435	(3)	Greek History from 403 B.C. to Roman Times
		Latin	408	(3)	Latin Literature in Prose
(b)	Change	Classical Studies	433		change in description

Economics

(a)	New courses	Economics	312	(3)	Political Economy of Capitalism
			370	(1½)	The Economics of Project and Programme Evaluation
			371	(1½)	Problems in Natural Resource Use

(b)	Changes	Economics	470 change in description
			480 change in description
			492 change in unit value

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF ARTS (continued)

English

(a)	New courses	English 211 (3)	Practical Criticism
		325 (3)	Studies in Major Authors
		341 (3)	The English Novel from Joseph Conrad to the Present
(b)	Changes	English 340 and 425 change in title	
	Deletions	English 372, 395.	

Fine Arts

(b)	Change	Fine Arts 477 change in description

Geography

(a)	New courses	Geography 423 (1½)	Attitudes Towards the North American Environment
		448 (1½)	Directed Studies in Geography
(b)	Changes	Geography 311	change in description
		324	change in title and description
		407	change in number, title and description, (now 327)
		424	change in title and description
		371	change in description
		379	change in description
		401	change in description
		449	change in description
		492	offered only in Summer Session
		411	change in unit value
		214	re-entered in Calendar

German

(a)	New courses	German 411 (3)	Introduction to Scandinavian Literature
		430 (3)	German Technical Translation
(b)	Changes	German 101	change in title
		201	change in description

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF ARTS

German (continued)

Course renumbering:

407 now 400; 409 now 402; 406 now 403;
400 now 406; 410 now 407; 413 now 408;
401 now 409; 412 now 410.

Deletion — German 230

Hispanic & Italian Studies

(b) Change — Italian 400 change in description

History

(a) New course — History 401 (3) French Canada from the End of the Eighteenth Century to the Present

(b) Change — History 307 change in title

Linguistics

(a) New courses — 435 (3) Contrastive Linguistics
445 (3) Sociolinguistics

Philosophy

(a) New courses — Philosophy 302 (1½) Deductive Logic
303 (1½) Intermediate Logic
304 (1½) Probability and Induction
305 (1½) Philosophy of Logic

Deletions — Philosophy 302 (old), 454

Political Science

(a) New courses — Political Science 420 (3) The Political Economy of Canada
470 (3) Public Policy and its Administration

(b) Changes — Political Science 428 change in title

Deletions — Political Science 416, 425

APPENDIX 'B' Wednesday, December 15, 1971.

Course and Curriculum Changes

FACULTY OF ARTS (continued)

Psychology

(b) Change — Psychology 409 change in description

Slavonic Studies

(a) New courses — Slavonic Studies 105 (3) Introduction to Russia and Eastern Europe
307 (3) Modern East European Literatures in Translation

Deletions — Polish 345, Slavonic Studies 412

Theatre

(a) New courses — Theatre 334 (3) Animation
433 (3) Projects in Film and Television
434 (3) Studies in Film and Television
455 (3) Advanced Technical Theatre and Stage Management

FACULTY OF COMMERCE AND BUSINESS ADMINISTRATION

(b) Changes — 410 and 411 change in title and description

FACULTY OF EDUCATION

Elementary Division

(a) New courses — Education 487 (3) Recent Developments in Elementary Education
380 Outdoor Environmental Studies

(a) Changes — Education 472 change in title and description
473 change in title and description
474 change in title and description
475 change in title and description
476 change in description
477 change in title and description

Social Studies 302 to be replaced by Education 402
Primary Education Major - add Ed. 380 to electives

Secondary Division

(a) Social Studies - new "Concentration" and new "Major" (Emphasis Canadian Studies)

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF EDUCATION

Secondary Division (continued)

(b) Add Ed. 493 to list of electives in Fifth Year and One Year Programme

(b) English Concentration and English Major - minor calendar changes

(b) Mathematics Concentration - add Math. 413; change Math. 495 to Math. 445

(b) Mathematics Major - First and Second Years, add Computer Science 210
Senior Years, add Math. 413; change Math. 495 to Math. 445

(b) Special Education Department - Ed. 418 change in description

(b) Education 408 - change in unit value
414 - change in title and description

FACULTY OF FORESTRY

(a)	New courses	362 (3)	Timber Harvesting
		395 (1½)	Forest Wildlife Ecology
		462 (1½)	Industrial Forest Management
(b)	Changes	495	change in description
		359	change in number (now 331)

Minor calendar changes

FACULTY OF GRADUATE STUDIES

Anthropology and Sociology

(a)	New course	Anthropology 525 (3)	Computerized Semantic Analysis of Myth

Botany

(b)	Change	Botany 515 change in description
	Deletion	Botany 517

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF GRADUATE STUDIES (continued)

Chemistry

(a)	New courses	Chemistry 509 (1)	Electron and photon impact spectroscopy
		510 (1)	Magnetic Resonance
(a)	Change	Chemistry 519 change in title and description	

Civil Engineering

(a)	New courses	Civil Engineering 587 (1½)	Transit Operations Engineering
		588 (1)	Transit Design Engineering
(b)	Changes	Civil Engineering 569	change in description and unit value
		521	change in unit value

Commerce

(a)	New course	Commerce 596 (1½)	Managerial Decision Making
(b)	Changes	Commerce 583	change in title and description
		584 and 585	change in unit value

Creative Writing

(b)	Change	C.W. 507 change in title	

Community & Regional Planning

(b)	Changes	Planning 425, 500, 501, 502, 505, 508 change in description	

Computer Science

(a)	New courses	510 (1½)	Numerical Methods in Partial Differential Equations I
		520 (1½)	Numerical Methods in Partial Differential Equations II
		542 (1-3)	Topics in Numerical Computation

Education

(a)	New course	584 (3)	Human Development: Self Processes in Education

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF GRADUATE STUDIES (continued)

Electrical Engineering

(a)	New course	E.E. 572 (½-1)	Advanced Topics in Control
(a)	Change	E.E. 575	change in title and description
(b)	Changes	E.E. 564	change in title
		591	change in description and unit value
		589	change in unit value
(b)	Deletions	E.E. 577, 581, 593, and 595	

Forestry

(a)	New course	Forestry 505 (1-3)	Advanced Studies in Forest Ecosystems

Geophysics

(b)	Changes	Geophysics 512	change in description
		501	change in description
		Astronomy 501	change in description

Mathematics

(b)	Change	Mathematics 509	change in title

Mechanical Engineering

(a)	New courses	M.E. 553 (1½)	Advanced Design I
		554 (1½)	Advanced Design II
		591 (1½)	Industrial Aerodynamics
		555 (1)	Hydrodynamic Lubrication
		556 (1)	Boundary Lubrication
		565 (1)	Linear Vibrations I
		566 (1)	Linear Vibrations II
		576 (1½)	Advanced Thermodynamics
		577 (1½)	Statistical Thermodynamics
		580 (1½)	Theory of Ideal Fluids
		581 (1½)	Theory of Low-Speed Airfoils
		587 (1)	Engineering Acoustics I
		588 (1)	Engineering Acoustics II
		589 (1½)	Aerodynamic Noise I
		590 (1½)	Aerodynamic Noise II

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF GRADUATE STUDIES

Mechanical Engineering (continued)

(a)	Change	M.E. 575 change in title, units and description
(b)	Changes	M.E. 583 and 584 change in description and unit value
(b)	Deletions	M.E. 559, 560, and 574
(a)	Deletions	M.E. 563, M.E. 565 (old), M.E. 566 (old), M.E. 571, M.E. 581 (old), M.E. 587 (old), M.E. 588 (old).

Metallurgy

(a)	New course	Metallurgy 560 (2) Metallurgical Transport Processes
(b)	Changes	554 change in description and unit value 584 change in description
(b)	Deletion	552

Oceanography

(a)	New course	Oceanography 509 (1) Biological Oceanographic Mechanisms
(b)	Change	508 change in description

Pathology

(a)	Change	Pathology 520 change in title and description
(b)	Change	502 change in title
(b)	Deletion	521

Physical Education & Recreation

(a)	New courses	573 (1½) Seminar in Mechanical Analysis of Human Movement 581 (1½) Seminar in the Sociological Aspects of Sport

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF GRADUATE STUDIES

Physical Education & Recreation (continued)

(b) Deletion 530A

Physics

(a) New courses Physics 533 (1) Laser Physics
539 (1) Waves and Tides
542 (1) Waves in Rotating Fluids

(539 and 542 replace former 2 unit course 539)

(a) Deletion 539 (old)

(b) Changes 517 change in description
518 change in title and description

Plant Science

(a) New courses Plant Science 525 (3) Crop Ecophysiology
536 (2) Plant Virology
537 (3-5) Topics in Plant Pathology

(a) Changes 511, 513, 516, 517, change in description

(b) Changes 538 change in title
530 change in unit value

(b) Deletions 509, 510, 512

Theatre

(a) New course Theatre 521 (3) Styles in Directing

FACULTY OF LAW

(b) Changes 207 and 244 change in description and unit value

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APPENDIX 'B'

Course and Curriculum Changes (continued)

SCHOOL OF NURSING

Extra-sessional courses May-July 1972

Nursing 253 (3) Behavioural Patterns in Illness and Health
281 (1) Introduction to Statistics and Research Methods
357 (3) Perspectives in Nursing

SCHOOL OF PHYSICAL EDUCATION AND RECREATION

(a) New courses Recreation 375 (1½) Recreation Leadership and the Group Process
Physical Education 229 (1) Squash, Handball and Racketball

FACULTY OF SCIENCE

Extra-sessional courses May-July 1972

Mathematics 318 (3) Discrete Random Processes
Computer Science 210 (3) Algorithms and Programming

Astronomy

(b) Change Astronomy 421 change in unit value

Calendar changes in the Fourth Year Astronomy majors programme and the Combined Honours Astronomy and Physics programme

(b) Changes Astronomy 200, 320, 420, 421, 431, 449 and General course 310, change in description

Biochemistry

(b) Change Biochemistry 412 change in description and unit value

Biology

(a) New course Biology 313 (1½) Elementary Molecular Biology

(b) Changes 101 and 102 change in description

Botany

(b) Changes Botany 305 and 330 change in hours

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF SCIENCE

Botany (continued)

(b) Changes — Botany 425 delete, now split into two courses:
426 (2) Plant Synecology and
427 (2) Plant Autecology

Chemistry

(a) New course — Chemistry 208 (3) Physical and Inorganic Coordination Chemistry

(b) Changes — 305 change in description

Computer Science

Change in Calendar statement - Credit may be obtained for only one of Computer Science 201, 251 and 210. Computer Science 200 may be taken for credit in conjunction with either Computer Science 201 or 251, but not with 210.

(b) Changes — 302 change in description
402 change in description and prerequisites

Geology

(b) Changes — Geology 324 change in description
405 addition to description
409 addition of prerequisite course
410 change in description

Geophysics

(b) Second Year Majors programme - replace Geology 304 with Geology 210

(b) Fourth Year Majors programme - replace 2 units from Geology 300, 317, 309 or 311 with Geology 304

(b) Changes — Replace Geophysics 404, 405 and 406 with:
Geophysics 415 (3) Geophysical Analysis

(b) Combined Honours Geophysics and Geology programme, Fourth Year - add Astronomy 320 to the choice of Physics courses offered

(b) Changes — Geophysics 201, 301, 310, 400, 402 change in description 412 change in title and description

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APPENDIX 'B'

Course and Curriculum Changes

FACULTY OF SCIENCE (continued)

Mathematics

(b) Changes — Drop Mathematics 204. Remove Mathematics 401 from the Calendar; Mathematics credit to be given for Computer Science 402. To be reviewed each year. Delete "I" from the title of Mathematics 422.

Microbiology

(b) Changes — Microbiology 321 correction of prerequisite: 324 and 325 must precede or be taken concurrently (to replace 323)

324 change in description

(b) Add Microbiology to Fourth Year majors and honours electives

(b) Delete Botany 303 and Microbiology 402 from Science electives; further electives added.

Physics

(b) Change — Physics 115 change in hours