The fifth regular meeting of the Senate of The University of British Columbia for the Session 1968-69 was held on Wednesday, January 8, 1969 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, Dr. M. Bloom, Mr. C. B. Bourne, Mr. F. K. Bowers, Mr. C. M. Campbell Jr., Dr. S. D. Cavers, Dr. J. D. Chapman, Dr. R. M. Clark, Dean I. McTaggart-Cowan, Dr. D. H. Copp, Dean G. F. Curtis, Mr. W. A. Ferguson, Mr. D. A. Freeman, Dean J. A. F. Gardner, Dr. W. C. Gibson, Mr. J. Guthrie, Dr. D. T. Kenny, Mr. K. M. Lysyk, Dean J. F. McCreary, Mr. Justice J. MacDonald, Dr. C. A. McDowell, Mr. I. S. McNairn, Mr. D. F. Miller, Dr. F. A. Morrison, Mr. D. Munton, Dr. J. M. Norris, Dr. H. P. Oberlander, Dr. A. J. Renney, Dean B. E. Riedel, Dr. G. Rosenbluth, Mr. S. A. Rush, Dr. R. F. Sharp, Dean M. Shaw, Acting Dean C. E. Smith, Dr. J. H. G. Smith, Dr. R. W. Stewart, Mr. M. Waldman, Dr. Wm. A. Webber, Dean P. H. White, Mr. D. R. Williams, Acting Dean J. H. Young.

Observers: Mr. J. A. Banham, Mr. T. A. Myers, Mr. J. F. Stott.

Messages of regret for their inability to attend were received from Chancellor J. M. Buchanan, Dr. F. K. Hare (President), Mr. R. M. Bibbs, Mr. D. M. Brousson, Mr. F. J. Cairnie, Dr. W. D. Finn, The Hon. Howard C. Green, Dr. N. A. Hall, Dr. W. S. Hoar, Mr. V. J. Housez, Mr. J. S. Keate, Dr. H. L. Kennleyside, Dean Helen McCrae, Dr. G. J. Parfitt, Mr. J. V. Rogers, Dr. M. W. Steinberg, Mr. B. Stuart-Stubbs, Mrs. B. E. Wales, Dr. H. V. Warren.

The Chairman opened the meeting by explaining that the President was in Eastern Canada and would be going to England. He would return via New York where he would be honoured by the American Meteorological Society and on January 30 would be representing the University at the installation of Dr. A. W. R. Carrothers as President of the University of Calgary.

Minutes of the Previous Meeting

Attention was drawn to an error on Page 4037 after the motion. It was agreed that item (i) only of the recommendations of the Faculty of Law had been referred to the Admissions Committee.

Mr. Lysyk)
Dean Shaw) *That the Minutes of the fourth regular meeting of Senate for the Session 1968-69 having been circulated, be taken as read and adopted with the above amendment to Page 4037.*

Carried

Business Arising from the Minutes

Committee on Enrolment Policy

It was reported that the following additions had been made to this Committee:

Mr. L. G. R. Crouch, Mr. A. J. Tilley, Mrs. B. E. Wales, Mr. D. Zirnhelt.

Dean Curtis)
Dr. Copp) *That Senate approve the additions to the membership of the Committee on Enrolment Policy.*

Carried

Submissions to the Perry Committee

The report of the Committee of Deans to the Perry Committee had been circulated to members of Senate, together with a report of the Presidential Advisory Committee on Internal and External Aspects of University Government.

Dr. J. H. Young spoke to the report on behalf of Dr. N. A. Hall, the Committee Chairman, who was unable to attend the Senate meeting.

Submissions to the Perry Committee (Continued)

Dr. Young briefly outlined the recommendations of the report, explaining that the Committee had been set up to advise the President, through Senate, whether to approve the report of the Committee of Deans or revise it. The Committee had made comparisons with briefs submitted independently by the Faculty Association and the Alumni Association and was in substantial agreement with the proposals put forward by the Committee of Deans subject to a few observations and amendments.

Briefly, the Deans had recommended two committees:

1. A Council on University Affairs, made up of the Presidents of the three Universities, possibly one Board members and one faculty member from each Senate; thus the membership would be drawn entirely from the Universities.

2. A Commission on University Finance, with three full-time members with extensive academic experience but no existing connections with the institutions, and lay members broadly representative of the public at large.

The amendments recommended by the Presidential Advisory Committee are condensed as follows:

1. To avoid the connotation of "academic" vs. "financial", the committee recommended that the "Commission on University Finance" be changed to the "Commission on Universities".

2. That the composition of the Council on University Affairs be set-out more specifically as follows:

Submissions to the Perry Committee

2. (Continued)

The President of each university

One member of the Board of Governors of each university

One academic member of Senate from each university.

3. That the following be substituted for Item (f) on Page 4 of the Deans' brief:

(f) to advise the Minister of Education on the relation of the planning and development of other post-secondary educational institutions to the universities.

4. "The suggestion that the Commission consist of 'full-time' and 'part-time' members may carry some undesirable connotations. This may be avoided to some extent by defining the Commission as a nine-man commission, three of whom shall be full-time Commissioners with extensive academic experience. "An alternative to this may be to define it as a three-man Commission linked-up with an Advisory Board that would be broadly representative of the public at large."

5. The Presidential Advisory Committee reinforced the suggestion of the Committee of Deans that the Commissioners should not be representatives of the three universities. It was stressed that the emphasis should be on their having extensive academic experience. It was pointed out that it was not the intention that each university should "name" a

Submissions to the Perry Committee

5. (Continued)

a representative to the Commission, and every attempt should be made to avoid the conflicts of interest that such a system would create. It was recommended that if a commissioner at the time of his appointment were associated with any university, he be granted an extended leave of absence to serve on the Commission.

The Committee recommended that their report be forwarded to the Perry Committee for consideration as recommendations and amendments to the report of the Committee of Deans, with the support of the University Senate.

Concern was expressed that it may be too late and it was suggested that Senate request assurance that this material could be considered. The Chairman agreed to write to Dr. Perry on behalf of Senate.

Dr. McDowell)
Dean Curtis)

That Senate support the recommendations of the Presidential Advisory Committee on Internal and External Aspects of University Government and that these be forwarded to the Perry Committee.

Consideration was given to changing the recommendations for membership of the Commission on University Finance (Commission on Universities) but no formal recommendation was made.

Whilst the recommendations of Dr. Hall's Committee indicated in the last paragraph on the first page that a case had not been made for a single university system with a single board, it was suggested that the

Submissions to the Perry Committee (Continued)

case had not been made against such a system and that while there would be an obvious loss of autonomy, there were, nevertheless, definite advantages to a federated system, namely that it would provide a mechanism for uniting academic and financial judgements so that the two would not be separated; the universities could present a single brief to the Government with all the difficulties ironed out before the brief reached the Government; it would provide the possibility of establishing existing elements in the university system and of cultivating new elements that were desirable; and it would provide a ready-made basis for the rationalization of the distribution of supporting services, such as the library. It was also suggested that the autonomy of the individual units could and would be quite effective in a federated system.

Dr. Young explained that one of the reasons that the committee had not considered a federated system was the lack of time.

Concern was expressed that whilst a federated system might well be unacceptable to our smaller sister universities, it was not desirable that we should imply a unanimous opinion when we had not had time to consider the system fully.

Dr. Gibson)
Dr. Webber) *That Senate make no submission to the Perry Committee at this time.*

Lost (20:13)

Concern was again expressed that we were perhaps not in agreement with the decision not to recommend a federated system and the following amendment to the motion to refer the report to the Perry Committee with Senate's support was moved:

Submissions to the Perry Committee (Continued)

Dr. Copp)
Dr. Stewart)

That the last paragraph at the foot of Page 1 of the report of the Presidential Advisory Committee on Internal and External Aspects of University Government be deleted.

This amendment was strongly supported since this paragraph had indicated that all the submissions had rejected the idea of a federated system, whereas this was not the case.

Carried
(2 against)

The original motion with the above amendment was then carried.

Notifications of approval by the Board of Governors of Senate recommendations (Subject to funds being available, where applicable)

(a) Proposal of the Faculty of Graduate Studies that the name and scope of the Institute of Earth and Planetary Sciences be changed - the new title being "Institute of Astronomy and Space Science".

(b) Proposal of the Faculty of Graduate Studies that an M.Sc. degree in the field of Human Nutrition be offered by the School of Home Economics.

(c) Proposal of the Faculty of Graduate Studies that a Ph.D. programme in Slavonic Literature be instituted.

(d) Proposal of the Faculty of Graduate Studies that a Master's degree without thesis be permitted in the M.A., M.Sc., M.B.A. and M.F. degree programmes, and changes in regulations governing Masters' degrees - the new regulations to apply to students currently enrolled.

(e) Proposal of the Faculty of Graduate Studies that the title of the Master's degree in Agriculture be changed from M.S.A. to M.Sc.

(f) Proposal of the Faculty of Graduate Studies to offer two new courses Anthropology 545 and Sociology 545.

(g) Proposal of the Faculty of Arts to offer Asian Studies 335 extra-sessionally in Japan in the summer of 1969.

Notification of approval by the Board of Governors of Senate recommendations (Continued)

(h) Proposal of the Faculty of Arts that extra-sessional courses be offered May/July, 1969, as recommended to Senate at its meeting of December 4, 1968.

(i) Proposal of the Faculty of Pharmacy to change its name to "The Faculty of Pharmaceutical Sciences" and to change the designation of the degree in Pharmacy from B.S.P. to B.Sc.(Pharm).

(j) Proposal of the Faculty of Science for changes in the procedure for determining degree standing for honours and major students.

Senate Membership

It was reported that Mr. W. T. Brown, an appointee of the Lieutenant-Governor in Council, had tendered his resignation and had written to the Minister of Education asking that he be replaced. He regretted severance of this close association with the University that was necessitated by pressure of other commitments that prevented his attendance at Senate meetings.

Dr. Young)
Dr. Copp) *That a vote of thanks be passed to Mr. Brown for his interest in the University in the past.*

Carried

Report of the President

Dean Cage reported that Dr. Hare had passed a suggestion to the Long-Range Objectives Committee to consider the possibility of a committee or group that might consider the formulation of experimental programmes. Dr. Belshaw informed Senate that this was in fact already under discussion by his committee.

Committee on Prizes, Scholarships and Bursaries

Dr. Morrison)
Dr. Young)

That the new awards shown in Appendix A be accepted, subject to the approval of the Board of Governors, and that letters of thanks be sent to the donors.

Carried

Reports of Committees of Senate

New Programmes Committee

Proposal of the School of Home Economics for an Honours Programme in Human Nutrition to be added to the existing Foods and Nutrition Programme

The report of the Committee indicated that the original proposal to split the existing programme in Human Nutrition and Dietetics into a Major Programme in Human Nutrition and a Major Programme in Dietetics had been withdrawn because these programmes would not differ substantially from the current one. The report supported the proposal to establish an Honours Programme in Human Nutrition provided the programme was approved by the Council of the School of Home Economics.

Mr. Bourne)
Dr. Gibson)

That the proposal of the School of Home Economics to establish an Honours Programme in Human Nutrition be approved.

It was suggested that the title should be "Human Nutrition" and not just "Nutrition" as had been shown on the Agenda. This could cause confusion with Animal Nutrition and other such programmes. Dr. Lee, the Director of the School, agreed the title on the Agenda was incorrect. The motion was then carried.

Reports of Committees of Senate

New Programmes Committee (Continued)

Proposal of the Faculty of Education to introduce one-year Diploma Programmes in (a) Education of the Mentally Retarded; (b) Education of Children with Learning Disorders; and (c) Education of Young Children

The report of the Committee recommended approval of the proposal.

Mr. Bourne)
Dr. Smith) *That the three new One-Year Diploma Programmes recommended by the Faculty of Education be approved.*

Carried

Proposal of the School of Physical Education to offer a degree of Bachelor of Recreation

The Chairman of the New Programmes Committee explained that the Committee was not ready to report on this item but hoped to do so at the next meeting of Senate.

It was suggested that in considering the proposal the Committee might take into consideration the reaction in non-academic circles to such a title.

Curriculum Committee

The Chairman of the Curriculum Committee was unable to attend the meeting and had asked that the report of the committee be deferred.

It was agreed that only items that were not satisfactory to the Curriculum Committee among the curriculum proposals contained in Appendix 'B' of the previous meeting's Minutes, would be returned to Senate.

Reports of Committees of Senate (Continued)

Admissions Committee

The Chairman explained that the material from the Senate Admissions Committee was not in the form of a proposal but was an outline of the existing admissions policy. Discussions had taken place with the junior colleges such as Vancouver City College, Capilano College, Selkirk College, and others, and the registrar hoped to put a statement in the calendar for 1969-70 to clarify the procedures in the transfer of college students to the University.

Members of Senate were invited to study the report and to raise questions concerning it at the next meeting of Senate.

Dean Cowan reported that the Academic Board had recently held a meeting with representatives of various institutions and he promised to bring the report of the Academic Board forward to Senate.

The Senate concurred in the recommendation of the Admissions Committee that the reference to the possible requirement of the Law School Admission Test for applicants to the Faculty of Law in 1970 be included in the 1969-70 calendar. Senate approval would be sought by the Faculty of Law if and when it was considered desirable to make the taking of the test mandatory.

Committee on Enrolment Policy

Dean Cowan spoke to the report explaining that the task of the Committee had been to make recommendations to meet the problems to be faced in September 1969.

Reports of Committees of Senate

Committee on Enrolment Policy (Continued)

Dean Cowan)
Dean White) *That the report of the Committee on Enrolment Policy be accepted.*

A discussion followed on the recommendations contained in Item 2 of the report. Whilst the recommendations would only make a reduction of 280 students, it was considered too late to make any drastic changes in admission requirements by September 1969.

Dr. Stewart)
Dean McCreary) *That the first paragraph of Item 2 of the report be deleted and that Senate approve the following specific recommendations of the Committee on Enrolment Policy:*

(a) That students seeking admission on the basis of Grade XIII be required to meet the same standing as those admitted from junior colleges; this would mean an overall average of 60% on the five subjects of a full study programme; students presenting only four or three subjects would be admitted with an average on the subjects presented of 65%.

(b) That the concession be removed of permitting a First Year student who has passed two courses in a failed year to repeat the year at the University, with provision for appeal to the Senate Admissions Committee.

(c) That a student in the Second Year of the Faculties of Agricultural Sciences, Arts, Education, Science (or in the Schools of these Faculties) or in First Year Commerce who passes in less than 6 units (i.e. does not pass in at least two full courses of a five or six course programme) be required to withdraw for at least one year, with provision for appeal to the Senate Admissions Committee.

Carried

Concern was expressed that the above recommendations were inadequate to provide the relief necessary and that consideration should still be given to raising the admission requirements for 1969-70 in view of the fact that there was a clause in the 1968-69 calendar indicating the University's intention of restricting enrolment to match available facilities.

Reports of Committees of Senate

Committee on Enrolment Policy (Continued)

Dr. Gibson)
Mr. Bowers)

That the Committee on Enrolment Policy be requested to ascertain what the consequences would be both to the University and to the students who would not be admitted if the admission requirements for all Freshmen were raised to 65% for September 1969.

It was requested that this informational report be available for the next meeting of Senate.

In further discussion of the motion it was pointed out that budget changes closely reflected the enrolment figures and that a reduction in the number of students to be admitted would require a concurrent reduction in the budget estimates. The motion was then carried.

It had been made clear that every effort was being made to make the best possible use of the facilities available and an investigation was being conducted into the extended use of lecture rooms and laboratories by increasing the hours of their use.

Dean Cowan)
Dean White)

That the Committee on Enrolment Policy in conjunction with the Long-Range Objectives Committee, be urged to take immediate steps to investigate a policy affecting the admission of students to the University in September 1970 and thereafter, and for the promotion of students enrolled in the Winter Session of 1969-70 and in subsequent years.

Carried

It was stressed that in order that adequate notice be given to those concerned the statement of policy should be available by September 1969.

Dr. Belshaw stated that the Long-Range Objectives Committee hoped to have its report available for Senate's consideration in May.

Reports of Committees of Senate

Committee on Enrolment Policy (Continued)

Dean Cowan)
Dean Armstrong)

That enrolment in First Year Architecture be restricted to 70, for the Session 1969-70 without prejudice to policy in future years. Furthermore, that no reference be made in the Calendar for 1969-70 to the limitation on the size of the First-Year class.

Carried

It was agreed that paragraph 3 of the report should be deleted.

Proposals of the Faculties

Faculty of Agricultural Sciences

Replacement of existing four-year general programme and five-year Honours Programme by:

(a) Four-Year Major Programme
(b) Four-Year Double-Major Programme
(c) Four-Year Honours Programme

This proposal had been passed to the Curriculum Committee by the Senate Agenda Committee.

Dean Shaw)
Dr. Renney)

That the above proposal of the Faculty of Agricultural Sciences be approved subject to no objections being raised by the Curriculum Committee of Senate.

A discussion followed on the proposed electives and members were asked to submit their comments in writing to the Chairman of the Senate Curriculum Committee as quickly as possible. The proposal would not be returned to Senate unless there were objections from the Curriculum Committee. The motion was then carried.

Proposals of the Faculties

Faculty of Agricultural Sciences (Continued)

Course Proposals

Dean Shaw)
Dr. Renney) *That the course proposals from the Faculty of Agricultural Sciences listed in Appendix 'B' be approved subject to no objections being raised by the Senate Curriculum Committee.*

Carried

Faculty of Applied Science

Dean Armstrong)
Mr. Miller) *That the course and curriculum proposals recommended by the Faculty of Applied Science contained in Appendix 'B' be approved subject to no objections being raised by the Senate Curriculum Committee.*

Carried

Faculty of Graduate Studies

Proposal to offer an M.Sc. Programme in Audiology and the Speech Sciences

This item had been referred to the New Programmes Committee by the Senate Agenda Committee.

Dean Cowan)
Dean McCreary) *That the proposal to offer an M.Sc. programme in Audiology and Speech Sciences as recommended by the Faculty of Graduate Studies be approved subject to no objections being raised by the New Programmes Committee.*

Carried

Proposals of the Faculties

Faculty of Graduate Studies (Continued)

Proposal to change the name of the M.S.P. Degree

Dean Cowan)
Dean Riedel) *That the name of the Master's degree in Pharmaceutical Sciences be changed from M.S.P. to M.Sc. as recommended by the Faculty of Graduate Studies.*

Carried

New Courses and Course Changes

Dean Cowan)
Dr. Norris) *That the new courses and course changes recommended by the Faculty of Graduate Studies listed in Appendix 'B' be approved subject to no objections being raised by the Senate Curriculum Committee.*

Carried

The Academic Year (1969-70)

The draft of the section on the Academic Year for inclusion in the General Information Bulletin had been circulated. The Registrar was requested to insert a date for the last day of lectures in the first term. It was explained that this had been deliberately left out since there was uncertainty concerning Christmas Examinations, but to assist professors to estimate the number of lectures to be available at least a tentative date was requested.

In connection with Christmas Examinations, Mr. McNairn requested that the Registrar investigate overlapping in Arts and Education where students registered in one faculty and taking courses in another had had problems with their Christmas Examination timetables.

The Academic Year (1969-70) (Continued)

The Academic Year was approved with minor changes on Pages 4 and 5.

Senate Elections

It was suggested that all members of faculty were not fully aware of the procedures for Senate elections and it was reported that members of faculty had expressed a desire that faculty representatives on Senate serve for one year only, with a provision for overlapping of terms. It was also suggested that the question of replacements for faculty members on leave of absence needed further consideration.

Dr. Belshaw)
Dr. Clark)

That the Committee on the Role and Organization of Senate be asked to investigate existing procedures for election of members of Faculty to serve on Senate and for the methods of replacing members of Faculty on Senate who go on leave of absence.

Carried

The meeting adjourned at 10:20 p.m.

The next meeting will be held on Wednesday, February 26, 1969.

Secretary

Confirmed,

Chairman.

APPENDIX 'A'

Summary of New Awards Recommended to Senate

The Armstrong, Brawner and Speton Scholarship

This scholarship of $300, gift of Armstrong, Brawner and Speton, Barristers and Solicitors, will be awarded to a deserving Second Year Law student who, in the opinion of the Selection Committee of the Faculty of Law, shows good scholastic ability and proven character, responsibility and initiative, and who is not the recipient of any other legal scholarship.

British Columbia Institute of Agrologists, Dean Blythe A. Eagles Bursary

A bursary of $75, a gift of the British Columbia Institute of Agrologists in honour of Dean B. A. Eagles, Dean Emeritus of Agriculture, for his outstanding contributions to the profession of agrology, will be awarded annually to a student who has completed at least one year in the Faculty of Agricultural Sciences. The award will be made on the recommendation of the Faculty of Agricultural Sciences to a student with high academic standing and awareness of the role of agricultural sciences in the modern world.

Canada Western Cordage Co. Ltd. Student Aid Fund

Established by Canada Western Cordage Co. Ltd., Vancouver, this revolving loan fund provides assistance to students in any year and faculty who have satisfactory academic standing and need financial help. Provided they apply early in the session, preference will be given to sons and daughters of employees of the Company. Terms and conditions for repayment of each loan will be decided by the University on the basis of the applicant's financial circumstances.

The Canadian Forest Products Ltd. Scholarship in Commerce

Four scholarships, each of the value of $250, are offered by Canadian Forest Products Ltd. to students in Commerce and Business Administration. Two of these awards are open to students entering the penultimate year and two are open to students entering the final year. Awards will be made on the basis of ability and academic standing.

Summary of New Awards Recommended to Senate (Continued)

The Canadian Forest Products Ltd. Scholarships in the Combined Biology and Forest Biology Honours Programme

Two scholarships, one of $250 and the other of $200, the gift of Canadian Forest Products Ltd., are offered to students proceeding to the Third or Fourth Year of the B.Sc. programme in honours Biology and Forest Biology. The awards will be made on the basis of ability and academic standing.

C.H.A.P. Copy Ltd. Scholarship

A scholarship of $100, gift of C.H.A.P. Copy Ltd., is offered annually in the Faculty of Law. It will be awarded on the recommendation of the Selection Committee of the Faculty to a worthy student who has a good academic record and is deserving of financial assistance.

The Mabel Johnston Scholarship in Nursing

This scholarship, established through a bequest from Mabel Johnson, a graduate of Nursing '28, is offered to a student proceeding to the Master's degree in Nursing. The award will be made on the recommendation of the School of Nursing.

The Northwest Survey Corporation Scholarship

A scholarship of $100, gift of the Northwest Survey Corporation, is offered annually to a student in Civil Engineering in the Faculty of Applied Science. It will be awarded to a student on completion of his Third Year, who is proceeding to the Final Year of Civil Engineering. The award will be made on the basis of his academic standing in general and his demonstrated interest in surveying, mapping and photogrammetry in particular. The recipient will be seleted by the Department of Civil Engineering.

APPENDIX 'B'

Course and Curriculum Changes referred to the Senate Curriculum Committee

FACULTY OF AGRICULTURAL SCIENCES

Proposal to replace the existing four-year general course programme and five-year honours course programme by:

(i) a four-year major programme
(ii) a four-year double major programme
(iii) a four-year honours programme

Course proposals

Agricultural Sciences

Change: Agriculture 100 changed to:

Agricultural Sciences 101 (3) Concepts and Resources in Agriculture I.

Agriculture 300 - name changed to Agricultural Sciences 300

Agricultural Economics

New: 400 (2) Enterprise Evaluation
408 (3) Research Methods

Changes: 300 - change in unit value
423 - change in unit value

deletions: 200, 402, 420

Agricultural Mechanics

Changes: 303 description changed
414 title and description changed
415 title changed
423 unit value reduced

Animal Science

New: 418 (3) Environmental Physiology

Changes: 313 change in unit value and description
318 change in unit value and description
322 description changed

FACULTY OF AGRICULTURAL SCIENCES

Animal Science (Continued)

Changes: 413 unit value reduced - prerequisite added: (Animal Science 313)
420 prerequisite added: Chemistry 230
422 unit value increased

Dairying

Changes: 301 transferred to Food Science as Food Science 403
406 transferred to Food Science as Food Science 302
413 transferred to Food Science as Food Science 413

Deleted: 200, 423, 425, 430

Food Science

New: 301 (1½) Food Chemistry
303 (1½) Dairy Products Technology
304 (1½) Food Processing - Tissue Systems
305 (1½) Food Processing - Fluid and Semisolid Systems
414 (1½) Applied Microbiology

Changes: 302 (1½) Analytical Methods (formerly Dairying 406)
403 (1½) Principles of Dairy Product Processing (formerly Dairying 301)
413 formerly Dairying 413

Plant Science

New: 313 (3) Genetics in Agriculture

Changes: Courses renumbered:

311 - formerly Hort. 301
320 - formerly Pl.Sc. 300
324 - formerly Pl.Sc. 344
332 - formerly Pl.Pr. 312
338 - formerly Pl.Pr. 308
339 - formerly Pl.Pr. 309
426 - formerly Pl.Sc. 406
420 - formerly Pl.Sc. 450

407 - number changed to 413; unit value reduced and title changed: Plant Breeding

Plant Protection 409 - number changed to 433, title and description changed: Crop Entomology

FACULTY OF AGRICULTURAL SCIENCES (Continued)

Poultry Science

Changes:	313	-	unit value, title and description changed: Genetics in Agriculture
	322	-	unit value increased
	404	-	title and description changed to: Poultry Management
	406	-	title and description changed to: Product Technology
	413	-	unit value increased, title and description changed: Advanced Genetics in Agriculture
	423	-	unit value changed
Deletion:	306		

Soil Science

New:	417 (1½)	Interpretation and Use of Soil Survey Information

Changes:	313	-	number changed to 413
	314	-	description changed
	404	-	description changed
	406	-	number changed
	416	-	title and description changed
	417	-	number changed to 419

Miscellaneous Courses numbered 425 are now all designated Research Project (1½ or 3)
Courses numbered 423 (Seminar) in each department are all 1 unit.

FACULTY OF APPLIED SCIENCE

Civil Engineering

New:	465	Municipal Water Supply and Wastewater Disposal
	466	Water Resources Engineering (Replaces part of existing 465 and 466)
	468	Basic Sanitary Engineering Concepts
	469	Environmental Sanitation
Changes:	360	description revised

Engineering Physics

Changes: Physics 409 - number changed to 459

Curriculum Change: Fourth Year: Delete Chem. 412

FACULTY OF GRADUATE STUDIES

Animal Science

Changes: 520 - to be divided into two 1½-unit courses:

518 Advanced Animal Physiology I
520 Advanced Animal Physiology II

522 - to be divided into two 1½-unit courses:

521 Advanced Animal Nutrition I
522 Advanced Animal Nutrition II

Architecture

Change 505 - title and description changed to:
Form and Structure

Astronomy

Change: Geophysics 501 - to be double-listed as Astronomy 501 with same title and description

Chemistry

Change: 500 - title, description and unit value changed:
Advanced Physical Chemistry

Civil Engineering

New:

544 (1) Water Resource Development I
555 (1) Water Resource Development II
558 (1) Water Resource Development Seminar
560 (1) Sanitary Engineering Design
562 (1½) Sanitary Engineering Laboratory
563 (1½) Unit Operations & Unit Processes in Sanitary Engineering
565 (1½) Water Supply Engineering
567 (1½) Water Pollution Control Engineering I
568 (1½) Water Pollution Control Engineering II

Education

New

531 (1½) The Interview and Non-Standardized Measures in Guidance Services
532 (1½) Tests in Pupil Personnel Services
677 (1½) Theories of Vocational Development
679 (1½) Information Systems in Guidance and Counselling

FACULTY OF GRADUATE STUDIES

Education (Continued)

Changes: 535 - to be divided into two 1½-unit courses:
534 Basic Principles of Testing
535 Test Construction

578 - to be divided into two 1½-unit courses:
578 Counselling Theory and Procedures I
678 Counselling Theory and Procedures II

582 and 592 to be replaced by:

592 (1½) Design and Analysis in Educational Research I
682 (1½) Design and Analysis in Educational Research II

Forestry

New: 580 (1-3) Studies in Forestry Policy
590 (1-3) Studies in Forest Land Use History

Geography

Changes: 502 - title changed: Cultural and Historical Geography
511 - title changed: Modeling Techniques in Geography
534 - number, title and unit value changed to:
509 - (1½) Cultural and Historical Geography
542 - title changed to: Urban and Transportation Geography

German

Change: 548 - unit value changed

History

New: 589 (6) Seminar in Diplomatic History

Metallurgy

Change: 572 - to be replaced by three 1-unit courses:
571 Solidification I
573 Solidification II
575 Phase Transformations

Plant Science

New: 516 (1-3) Advanced Landscape Horticulture

FACULTY OF GRADUATE STUDIES (Continued)

Zoology

New: 530 (2) Vertebrate Reproduction

Food Science

New: 503 (1½) Advanced Dairy Chemistry
504 (1½) Sensory Properties of Food
513 (1½) Advanced Cell Culture

Changes: Agriculture 500 - name changed to Food Science 500
Agriculture 530 - name changed to Food Science 530
Agriculture 549 - name changed to Food Science 549