

DRAFT UNTIL APPROVED BY SENATE

MINUTES OF A MEETING OF THE SENATE OF SIMON FRASER UNIVERSITY HELD  
MONDAY, DECEMBER 4, 1978, 3172 ADMINISTRATION BUILDING, 7:30 P.M.

OPEN SESSION

Present: Birch, D. R., Acting Chairman

Arrott, A. S.  
Brown, R. C.  
Calvert, T. W.  
Carlson, R. L.  
Dawson, A. J.  
Dobb, T. C.  
Frydenlund, D.  
Geen, G. H.  
Gingerich, J. C.  
Hauka, D. P.  
Ivany, J.W.G.  
Jones, C.H.W.  
Kemp, C. L.  
McMillan, D. B.  
Okuda, K.  
Overholt, M. J.  
Palmer, P. L.  
Pinfield, L. T.  
Reilly, N. R.  
Rieckhoff, K. E.  
Timberlake, A. J.  
Tuinman, J. J.  
Wagner, P. L.  
Walkley, J.  
Webster, J. M.  
Weinberg, H.  
Weinkam, J. J.  
Wells, E. J.  
Wheatley, J.  
Young, J. O.

Absent Blaney, J. O.  
Cote, P. T.  
Douglas-Crampton, D.  
Doherty, P. M.  
Harrison, J.  
Hindle, L.  
Hobson, R. F.  
Holweg, B. A.  
Hoyt, G. C.  
Keltner, A. A.  
Luetzen, S.  
Mackauer, J.P.M.  
Moffatt, D.  
Resnick, L.  
Thomas, L. E.  
Wyatt, J. D.

In attendance: E. W. Alderson  
L. Cohen  
I. Garland  
B. Gartrell  
M. C. Roberts  
J. H. Tietz

Evans, H. M., Secretary  
Nagel, H. D.  
Norsworthy, R., Recording Secretary

1. APPROVAL OF AGENDA

The agenda was approved as circulated.

2. APPROVAL OF MINUTES

The minutes of the Open Session of November 6, 1978 were approved as distributed.

3. BUSINESS ARISING FROM THE MINUTES

There was no business arising from the minutes.

4. REPORT OF CHAIRMAN

The Chairman reported that the motions approved at the November meeting of Senate with respect to changes to the selection procedures for faculty representation on the Search Committee for the Academic Vice-President and on the Search Committee for the Dean of Graduate Studies were approved by the Board and would be in effect for future committees.

Senate was advised that the proposal for the Kelowna School of Resource Management approved by Senate at its special meeting held on November 20, 1978 was approved by the Board. The Board also approved a budget submission for operating funds in excess of one million dollars and a capital budget. The proposal will be considered by the Universities Council on Friday December 8, 1978.

5. REPORTS OF COMMITTEES

1) Senate Committee on Undergraduate Studies

The Chairman drew attention to the fact that there were some changes in the form of the Agenda, with a number of papers for information; some for action and some for both information and action. Unless there were specific queries it would be taken that the information items were disposed of, proceeding through items in agenda order.

Moved by A. Arrott, seconded by J. Wheatley,

"That the formal placing of the motions contained in Senate papers S78-132, 134, 136, 137, 138, 139, 143, 144, 145, 146, 148, 151, 152, 154, 155, 156 be combined but the papers treated seriatim; with Senate papers S78-142, 147, and 150 to be considered separately."

It was understood that motion of approval would apply to those Senate papers contained in the first portion of the motion.

Question was called, and a vote taken.

MOTION TO COMBINE CARRIED

(NOTE: Papers for information only or for action with the pertinent motions under this section will follow in order with S78-142, 147 and 150 at the end.)

a) Paper S.78-131 - Changes - Archaeology

Acting in accordance with the powers delegated to the Senate Committee on Undergraduate Studies by Senate (S.78-10) the Senate Committee on Undergraduate Studies approved, at its meeting on November 7, 1978, changes to the description of ARC. 372-5 - Archaeological Laboratory Techniques, as detailed in S.78-131. In accordance with S.78-10, this action is being reported to Senate for information only.

b) Paper S.78-132 - Changes - English, including New Course

(A) Following action taken by the Senate Committee on Undergraduate Studies at its meetings on October 24 and November 7, 1978, the following changes in title, description and prerequisites for ENGL 372-4 are presented to Senate for information only:

- i) Change in title from "Creative Writing" to "Creative Writing A";
- ii) Addition of description as follows:  
Seminar Workshop in Creative Writing for students who have an interest and some writing experience in poetry, fiction or drama. The emphasis of the course may vary from semester to semester.
- iii) A change in prerequisites from "Permission of the Instructor is also required" to:  
Students may take both ENGL 372 and 373 in any order, but may count only one of them towards English Honors or a Major or Minor in English. Permission of the Department is required.

MOTION

- (B) "That Senate approve and recommend approval to the Board of Governors of the new course ENGL 373-4 - Creative Writing B, as set forth in S.78-132."

Footnote: The Action of SCUS in (A) is in accordance with the authority delegated to SCUS by Senate (S.78-10).

Question was called on Motion B, and a vote taken.

MOTION CARRIED

c) Paper S.78-133 - Changes - Geography

Acting in accordance with the powers delegated to the Senate Committee on Undergraduate Studies by Senate (S.78-10) the Senate Committee on Undergraduate Studies approved, at its meeting on November 7, 1978, changes in the prerequisites, descriptions and titles of certain Geography courses as outlined below and as detailed in S.78-133. In accordance with S.78-10, this action is being reported to Senate for information only.

- a) Prerequisite change, GEOG 313-3 - Geomorphology
- b) Description change - GEOG 315-3 - Biogeography I
- c) Prerequisite change - GEOG 317-3 - Soil Geography
- d) Title change - GEOG 325-3
- e) Description change - GEOG 415-5 - Biogeography II

d) Paper S.78-134 - Changes - History, including New Course

(A) Acting in accordance with the powers delegated to the Senate Committee on Undergraduate Studies by Senate (S.78-10), the Senate Committee on Undergraduate Studies approved, at its meeting on November 7, 1978, a change in the description of the course HIST 489-5 - Studies in History, as detailed in S.78-134. In accordance with S.78-10 this action is being reported to Senate for information only.

MOTION

- (B) "That Senate approve and recommend approval to the Board of Governors the new course HIST 490-5 - Studies in History, as specified in S.78-134."

Question was called on Motion B, and a vote taken.

MOTION CARRIED

e) Paper S.78-135 - Changes - D.L.L.L

Acting in accordance with the powers delegated to the Senate Committee on Undergraduate Studies by Senate(S78-10) the Senate Committee on Undergraduate Studies approved, at its meeting on October 24, changes in the descriptions of certain Spanish courses as outlined below and detailed in S78-135. In accordance with S78-10, this information is being provided to Senate for information only.

Languages, Literatures and Linqustics

- a) SPAN 442-5 - Modern Spanish Poetry - Change in Description
- b) SPAN 451-5 - Modern Spanish-American Novel - Addition of Description
- c) SPAN 452-5 - Modern Spanish-American Poetry - Change of Description

f) Paper S.78-136 - Changes - Philosophy, including Program Changes and New Courses and Deletion of Courses

"That Senate approve and recommend approval to the Board of Governors the items outlined below, other than the items for information, and detailed in S.78-136.

- a) Change in prerequisites, lower division courses  
- page 1, 2
- b) Change in prerequisites, upper division courses  
- page 2, 3
- c) Change in requirements for Minors, Majors, Honors  
- lower division courses and upper division courses - pages 4, 5, 6, 7
- \* d) Description change PHIL 150 - History of Philosophy I
- \* e) Description change PHIL 151 - History of Philosophy II
- f) Deletion of general prerequisite statement for 200 division courses
- \* g) Prerequisite change PHIL 203-3 - Epistemology and Metaphysics
- \* h) Title change, credit change, description change - PHIL 210-4
- i) New Course PHIL 214-3 - Elementary Formal Logic II
- \* j) Change in Course Designation, Prerequisite - PHIL 243-3 - Historical Studies in the Philosophy of Science;  
j) and Discontinuation of G.S. 201
- k) Title and Description Change - PHIL 280-3
- l) New Course - PHIL 301-3 - Topics in Epistemology and Metaphysics
- \* m) Title Change, Prerequisite Change, Deletion of Description - PHIL 310-3
- \* n) Prerequisite Change - PHIL 314-3 Topics in Logic I
- \* o) Prerequisite Change - PHIL 414-5 Topics in Logic II
- p) New Course - PHIL 320-3 - Social and Political Philosophy
- q) New Course - PHIL 321-3 - Moral Issues and Theories
- \* r) Prerequisite Change - PHIL 421-5 - Ethical Theories
- \* s) Prerequisite Change - PHIL 340-3 - Philosophical Methods
- \* t) Prerequisite Change - PHIL 341-3 - Philosophy of Science
- \* u) Prerequisite Change - PHIL 344-3 - Philosophy of Language I
- v) New Course - PHIL 452-5 - Kant and the Nineteenth Century and Deletion of PHIL 451 - Kant
- \* w) Title Change - PHIL 453-5
- x) Delete PHIL 402-5 - Philosophy of Perception  
PHIL 410-5 - Inductive Logic  
PHIL 445-5 - Theories of Explanation."

Footnote. With regard to the discontinuation of G.S.201 of Continuing Studies, the transfer of this course together with the appropriate resources to the Department of Philosophy has the approval of the Faculty of Interdisciplinary Studies and the Dean of Continuing Studies.

B) Acting in accordance with the powers delegated to the Senate Committee on Undergraduate Studies (S.78-10), the Senate Committee on Undergraduate Studies approved at its meeting of November 7, 1978, various changes to the descriptions, prerequisites, titles and designations of various Philosophy courses as outlined by the asterisked items above and as detailed in S.78-136. In accordance with S.78-10, these actions are being reported to Senate for information only.

Professor J. Tietz of the Philosophy Department was seated to respond to questions in connection with the proposed changes.

T. Calvert noted the wording of the footnote contained on the motion sheet was incorrect. The first sentence should read, "With regard to the discontinuation of G.S. 201 of General Studies." not "...of G.S. 201 of Continuing Studies." J. Tuinman drew attention to the statement on page 3 of the document which stated approval of the instructor was required. It was agreed that it should read that approval of the Department was required and that appropriate correction would be made to the paper. Responding to questions from J. Young, Professor Tietz advised that the proposed changes were designed to enable the Department to better meet the interests of students.

Question was called on the portions of the paper requiring Senate action, and a vote taken.

MOTION CARRIED

g) Paper S.78-137 - Changes - Political Science, including New Course

(A) In accordance with the authority delegated to it by Senate (S.78-10), the Senate Committee on Undergraduate Studies approved the addition of course descriptions to various Political Science courses as outlined below and detailed in S.78-137.

In accordance with S.78-10, this action is being reported to Senate for information only.

MOTION

- B) "That Senate approve and recommend approval to the Board of Governors the addition of the new course POL. 334-3 - Government and Politics: Selected Eastern European States, as outlined below (item (c)) and detailed in S.78-137.
- a) Addition of course descriptions:
    - POL.330-3 - Government and Politics: Great Britain
    - POL.331-3 - Government and Politics: France
    - POL.332-3 - Government and Politics: United States
    - POL.335-3 - Government and Politics: Peoples Republic of China I
    - POL.336-3 - Government and Politics: Peoples Republic of China II
    - POL.337-3 - Government and Politics: Selected Latin American Nations I
    - POL.338-3 - Government and Politics: Selected Latin American Nations II
    - POL.339-3 - Government and Politics: Selected African Nations
    - POL.430-3 - Government and Politics: Selected Asian Nations
  - b) POL.333-3 - Minor change of title and addition of course description
  - c) POL.334-3 - Government and Politics: Selected Eastern European States - new course proposal
  - d) Change in description: POL.431-3 - Comparative Western European Systems; POL.433-3 - Comparative Developing Systems."

Footnote. All items above, except item (c) involving the introduction of a new course, are presented to Senate for information only.

Professor L. Cohen of the Department of Political Science was seated to respond to questions in connection with the proposed changes.

Question was called on motions contained in section B of the paper, and a vote taken.

MOTION CARRIED

h) Paper S.78-138 - Changes - Psychology, including Program Requirements, New Courses, Deletion of Courses

"That Senate approve and recommend approval to the Board of Governors the following changes in the Psychology Program as detailed in S.78-138:

- a) Change in requirements for Honors
- b) New course - PSYC 280-3 - Biological Bases of Behaviour
- c) New course - PSYC 300-3 - Laboratory in Psychophysiology
- d) Title change, description change, prerequisite change - PSYC 335-3 - Sensation I
- e) New course - PSYC 336-3 - Sensation II
- f) Deletion of PSYC 347-3 - Motivation and Work
- g) New course - PSYC 356-3 - Developmental Disorders
- h) Deletion of PSYC 380-3 - Physiological Psychology
- i) New course - PSYC 381-3 - Introduction to Physiological Psychology
- j) New course - PSYC 382-3 - Physiology and Complex Behaviour
- k) Deletion of PSYC 415-5 - Measurement

The new course PSYC 356-3 - Developmental Disorders, was the focus of particular attention at SCUS both with regard to prerequisites and resources. After discussions with the Department of Biosciences, BISC 202 was included as a recommended prerequisite. The library reported that it did not carry all the resources listed for the course but on further investigation the department indicated that it was satisfied with the current resources and was prepared to give the missing materials high priority from the Department's library allocation in future years.

Question was called, and a vote taken.

MOTION CARRIED

i) Paper S.78-139 - Changes - Sociology and Anthropology

(A) Acting in accordance with the powers delegated to the Senate Committee on Undergraduate Studies by Senate (S.78-10) the Senate Committee on Undergraduate Studies approved, at its meeting on November 7, 1978, changes in the titles and descriptions of certain Sociology and Anthropology courses as outlined below and detailed in S.78-139. In accordance with S.78-10, this action is being reported to Senate for information only:

- a) Title change - S.A.140-4
- b) Title and description change - S.A.170-4
- c) Title change - S.A.203-4

MOTION

(B) "That Senate approve and recommend approval to the Board of Governors of the addition of S.A.370-4 - History of Anthropological Thought as a prerequisite for all upper division Anthropology courses:

- S.A. 323 - Anthropology of Religion
- S.A. 332 - Kinship
- S.A. 368 - Economic Anthropology
- S.A. 369 - Political Anthropology
- S.A. 467 - Culture and Personality
- S.A. 468 - Cultural Ecology
- S.A. 469 - Symbolism and Myth."

Question was called on the motion contained in section B of the paper, and a vote taken.

MOTION CARRIED

j) Paper S.78-140 - Changes - Centre for the Arts - Descriptions and Prerequisites

Acting in accordance with the power delegated to the Senate Committee on Undergraduate Studies by Senate (S.78-10), the Senate Committee on Undergraduate Studies approved, at its meeting on October 24, 1978, changes in the descriptions and prerequisites of certain Fine and Performing Arts courses as outlined below and as detailed in S.78-140. In accordance with S.78-10, these actions are being reported to Senate for information only.

Centre for the Arts

- a) Change in description of Nature of Course from ... "Laboratory" to ... "Studio" for various courses
- b) Course description change - FPA.151-3 - Introduction to Acting
- c) Change in prerequisite - FPA.250-3 - Dramatic Interpretation I
- d) Change in prerequisite - FPA.251-3 - Dramatic Interpretation II
- e) Change in prerequisite - FPA.350-3 - Scene Study for Actors I
- f) Change in prerequisite - FPA.351-3 - Scene Study for Actors II
- g) Change in course description - FPA.424-5 - Directed Study in Dance Performance
- h) Change in description - FPA.110-6 - The Arts in Context: The Renaissance
- i) Change in course prerequisite for FPA.430-5 - Directed Studies in Film Production II

Paper S 78-141 - Changes - Centre for the Arts - Descriptions and Prerequisites

Acting in accordance with the authority delegated to it by Senate (S.78-10), the Senate Committee on Undergraduate Studies approved changes in prerequisites and descriptions for certain Fine and Performing Arts courses as outlined below and detailed in S.78-141. In accordance with S.78-10 these actions are being reported to Senate for information only.

- (1) Prerequisite change FPA.237-3 - The History and Aesthetics of Cinema II
- (2) Prerequisite change FPA.456-3 - Conceptual Approaches to Drama
- (3) Description change FPA.321-3 - Contemporary Dance Technique and Theory IV  
Description change FPA.420-3 - Contemporary Dance Technique and Theory V  
Description change FPA.421-3 - Contemporary Dance Technique and Theory VI.

k) Paper S.78-143 - Changes - Computing Science, New Course and Program Requirements

"That Senate approve and recommend approval to the Board of Governors of the proposed revisions to the Computing Science Program as outlined below and detailed in S.78-143:

- a) New Course Proposal - CMPT 405-3 - Design and Analysis of Computing Algorithms
- b) Changes in upper division course requirements
  - (1) Requirements for a Major in CMPT
  - (2) Additional requirements for the degree
  - (3) Requirements for Honors in CMPT
  - (4) Additional requirements for the degree."

J. Weinkam noted the following corrections were required to the supporting documentation;

Table 1 CMPT 405 Title correction from "Design and Analysis of Algorithms" to "Design and Analysis of Computing Algorithms".

Table 2 Change "Analytic Tools for Scientific Computation" to "Analytical Tools for Scientific Computation". The same change to be made to section i) under the section for "Program for a Major in Computing Science".

Question was called, and a vote taken.

MOTION CARRIED

1) Paper S.78-144 - Changes - Kinesiology

MOTION

(A) "That Senate approve and recommend approval to the Board of Governors the addition, as specified in S.78-144, of BICH 440 to the list of upper division options available to students to fulfil requirements in Kinesiology, as part of the nine hours described on page 330 of the 1978-79 calendar."

(B) Acting in accordance with the powers delegated to the Senate Committee on Undergraduate Studies by Senate (S.78-10), the Senate Committee on Undergraduate Studies approved, at its meeting on October 24, 1978, changes in description and prerequisite for Kinesiology courses as outlined below and detailed in S.78-144. In accordance with S.78-10 this information is being provided to Senate for information only.

- a) Change in description - KIN.303-3 - Kinanthropometry
- b) Change in prerequisite - KIN.326-3 - Functional Anatomy.

Question was called on the motion contained in section A of the paper, and a vote taken.

MOTION CARRIED

m) Paper S.78-145 - Changes - AME. Program, Addition of Courses

"That Senate approve and recommend approval to the Board of Governors the addition of the following courses to the list of courses with Africa/Middle East content, as outlined in S.78-145:

- i) \*POL. 433-3 - Comparative Developing Systems
- ii) \*S.A. 369-4 - Political Anthropology
- iii) \*GEOG 263-3 - Selected Regions."

Footnote. The asterisk before each course title will ensure that the course will only be recognized for the AME. Minor when taught by a member of faculty participating in the program.

Question was called, and a vote taken.

MOTION CARRIED

n) Paper S.78-146 - Changes - Canadian Studies Program -  
1. Addition of Courses, Deletion of Courses

"That Senate approve and recommend approval to the Board of Governors the addition of courses as outlined below to the Canadian Studies Program as courses available for Canadian Studies credit and also the deletion of other courses as outlined below:

I. Courses to be added

Department of Communication

- CMNS 230-3 - Introduction to Communication Media
- CMNS 333-3 - Communication Policy in Canada - Past, Present, and Future
- CMNS 336-3 - Social Change and Community Media
- CMNS 437-5 - Communications and Community Advocacy (same course as CMNS 401-5 which has been renumbered)
- CMNS 445-5 - Communication and International Development: The Role of Canadian Institutions

Department of Economics and Commerce

- ECON/COMM 280-3 - Introduction to Labor Economics
- ECON/COMM 293-3 - Law in the Economic Society
- ECON 353-5 - Economic History of North America (with approval of the Program Director)
- ECON 381-5 - Labor Economics
- ECON/COMM 386-5 - Industrial Relations
- ECON/COMM 397-5 - Government and Business (with approval of the Program Director)
- ECON 480-3 - Seminar in Employment and Social Security Policy
- ECON/COMM 498-3 - Directed Studies (with approval of the Program Director)

Department of Geography

- GEOG 322-3 - Geography of Primary Activities
- GEOG 323-3 - Geography of Manufacturing
- GEOG 385-3 - Agricultural Geography
- GEOG 421-5 - Geography of Resource Development
- GEOG 444-5 - Regional Planning II
- GEOG 445-5 - Rural Planning

Department of History

- HIST 201-3 - The History of Western Canada

Department of Languages, Literatures and Linguistics

- FREN 341-3 - French-Canadian Literature in Translation
- LING 230-3 - Amerindian I

Department of Political Science

- POL. 452-3 - Government Regulation

Department of Sociology and Anthropology  
S.A. 140-4 - Introduction to B.C. Ethnography

Women's Studies Program

W.S. 201-3 - Women in Canada 1600-1920

W.S. 202-3 - Women in Canada 1920 to the Present

II. Delete the following courses

HIST 110-3 - Studies in Historical Method

CMNS 332-3 - Problems and Techniques in Social  
Documentation

CMNS 401-5 - Communications and Community  
Advocacy."

Footnotes:

1. The course CMNS 230, 333 and 336 already appear in the Canadian Studies listing and their entry here is solely intended to introduce corrections to the titles.
2. The courses marked with an asterisk are already included in the Canadian Studies curriculum where they appear with an "ECON" designation. They should also be recognized under the "COMM" designation in accordance with the practice of the Department of Economics and Commerce.

Professor B. Gartrell was seated to respond to questions.

It was noted that the title for S.A. 140-4 appeared to be incorrect. It was agreed that it would be checked and appropriate changes made to Senate papers if necessary.

Question was called, and a vote taken.

MOTION CARRIED

Secretary's Note - Following the Senate meeting, it was confirmed the correct title for S.A. 140-4 is "Introduction to the Ethnography of British Columbia".

- o) Paper S.78-148 - Changes - Latin American Studies Program - Addition of Courses

"That Senate approve and recommend approval to the Board of Governors the addition of the following courses to the list of courses with Latin American content, as outlined in S.78-148:

- i) Courses with exclusive Latin American content
  - a) GEOG 263-3 - Selected Regions
  - b) S.A. 363-4 - Social Change in the Third World
- ii) Courses with partial Latin American content
  - a) HIST 104-3 - History of the Americas to 1963
  - b) SPAN 360-3 - Hispanic Culture II."

Question was called, and a vote taken.

MOTION CARRIED

p) Paper S.78-149 - Changes - Biological Sciences

In accordance with the authority delegated to it by Senate (S.78-10), the Senate Committee on Undergraduate Studies approved, at its meeting on November 14, 1978, the change in prerequisites for BISC 404-3 - Plant Ecology, from "recommended BISC 300-3, 347-3, 326-3 or 337-3" to

Recommended BISC 300-3, 347-3 and 310-3

In accordance with S.78-10, this action is being reported to Senate for information only.

r) Paper S.78-151 - Changes - Physics, including Laboratory Changes, Major and Honors Requirement Changes, New Courses, Deletion of Courses

"That Senate approve and recommend approval to the Board of Governors of the proposed changes in the Physics program as outlined below and detailed in S.78-151:

(A) Physics - lower division laboratory changes

- a) PHYS 131-2 - change of vector
- b) PHYS 233-3 - change of prerequisite
- PHYS 234-2 - change of prerequisite
- PHYS 235-2 - change of prerequisite
- PHYS 231-3 - deletion of course
- PHYS 232-3 - deletion of course
- PHYS 236-1 - deletion of course
- c) Required lower division laboratory courses for Physics Major and Physics Honors students
- d) Laboratory prerequisite for third-year Physics laboratories

(B) Proposed upper division Physics changes

- a) PHYS Major - revised upper division PHYS requirements
- b) PHYS Honors - revised upper division PHYS requirements
- c) PHYS Honors - revised upper division MATH requirements
- d) New courses:
  - PHYS 325-3 - Relativity and Electromagnetism
  - PHYS 326-3 - Electronics and Instrumentation
  - PHYS 331-3 - Electronics Laboratory
  - PHYS 344-3 - Thermal Physics
  - PHYS 345-3 - Statistical Physics
  - PHYS 355-3 - Optics
  - PHYS 384-3 - Methods of Theoretical Physics I
  - PHYS 385-3 - Quantum Mechanics
  - PHYS 413-3 - Advanced Mechanics
  - PHYS 415-3 - Quantum Mechanics
  - PHYS 425-3 - Electromagnetic Theory
  - PHYS 465-3 - Solid State Physics
  - PHYS 484-3 - Methods of Theoretical Physics II

- e) Prerequisite change and title change, PHYS 332-3
- f) Change in course description and prerequisite, PHYS 431-4
- g) Deletion of courses:
  - PHYS 334-4 - Introduction to Electronics
  - PHYS 341-4 - Thermal and Statistical Physics
  - PHYS 381-4 - Modern Physics
  - PHYS 382-4 - Mathematical Physics
  - PHYS 411-4 - Classical Mechanics
  - PHYS 412-4 - Quantum Mechanics
  - PHYS 421-4 - Electromagnetism
  - PHYS 461-4 - Solid State Physics

Footnote: It should be noted that in the description of Major and Honors requirements in Physics there is reference to two nuclear science courses. These courses will be dealt with in a separate motion from the Senate Committee on Undergraduate Studies.

N. Reilly informed Senate that the 300 and 400 division changes would be phased into operation, with 300 changes starting in Fall 79-3 and 400 division changes in Fall 80-3, with discontinuation of the earlier courses similarly being phased.

Question was called, and a vote taken.

MOTION CARRIED

s) Paper S.78-152 - Changes - Nuclear Science, New Course and Redesignation of CHEM 442

"That Senate approve and recommend approval to the Board of Governors the proposals relating to the introduction of Nuclear Science courses as outlined below and detailed in S.78-152:

- i) The introduction of a new course NUSC 485-3 - Particle Physics
- ii) Deletion of PHYS 471-4 - Nuclear Physics
- iii) The renaming of CHEM 442-3 - Nuclear Chemistry as NUSC 442-3 - Properties of Nuclear Matter and prerequisite change
- iv) That these courses appear in both the Chemistry and Physics sections of the calendar
- v) That these courses be available as upper division options for degree programs in Chemistry Minor, Major and Honors programs and also Chemical Physics Major and Honors programs."

K. Rieckhoff drew Senate's attention to the cooperative undertaking by two departments to offer these courses.

Question was called, and a vote taken.

MOTION CARRIED

t) Paper S.78-153 - Changes - Chemistry Prerequisites

Acting in accordance with the authority delegated to it by Senate (S.78-10), the Senate Committee on Undergraduate Studies approved, at its meeting on November 14, 1978, the following changes in prerequisites for Chemistry 362-3 and 364-2:

- a) Change in prerequisite for CHEM 362-3 - Physical Chemistry III from "MATH 253-4 and one of CHEM 261-3 or PHYS 341-4" to "MATH 253-4 and one of CHEM 261-3 or PHYS 344-4."
- b) Change in prerequisite for CHEM 464-2 - Physical Chemistry of Solutions from "CHEM 362-3 or PHYS 341-4" to "CHEM 362-3 or PHYS 345-3."

These changes are necessitated by the revisions in the Physics Program.

These actions are being reported to Senate in accordance with S.78-10 for information only.

Paper S.78-154 - Changes - Chemistry Major and Honors Program Changes

"That Senate approve and recommend approval to the Board of Governors the changes in the Chemistry Major and Honors programs as outlined in S.78-154."

Question was called, and a vote taken.

MOTION CARRIED

u) Paper S.78-155 - Changes - Biophysics Program

"That Senate approve and recommend approval to the Board of Governors the proposed changes in the Biophysics program as outlined below and detailed in S.78-155.

- a) PHYS 344-3 may be substituted for CHEM 261-3
- b) MATH 154-3, 155-3 may be substituted for MATH 151-3, 152-3
- c) Addition of PHYS 131-2, 233-2; Deletion of PHYS 231-3
- d) Replacements: PHYS 384-3 replaces PHYS 382-4  
PHYS 345-3 replaces PHYS 341-4  
PHYS 331-3 replaces PHYS 334-4  
PHYS 385-3 replaces PHYS 381-4  
PHYS 415-3 replaces PHYS 412-4
- e) Prerequisite changes:  
PHYS 443-3 - Biophysics Laboratory  
PHYS 482-3 - Physics of Biological Membranes and Membrane Models  
PHYS 483-3 - Topics in Mathematical Biophysics."

Question was called, and a vote taken.

MOTION CARRIED

v) Paper S.78-156 - Changes - Chemical Physics Program

"That Senate approve and recommend approval to the Board of Governors the proposed changes in the Chemical Physics program as outlined below and detailed in S.78-156:

- a) Changes in Major Program
  - 1) Lower Division Physics changes
  - 2) Proposed Upper Division Physics required courses
  - 3) Notes
- b) Changes in Honors Program
  - 1) Lower Division Physics Changes
  - 2) Proposed Upper Division Physics required courses
  - 3) Notes
- c) Use of Nuclear Science courses 442-3 and 485-3 as electives in either Upper Division Chemistry or Upper Division Physics toward a Major or toward Honors."

Question was called, and a vote taken.

MOTION CARRIED

Paper S.78-142 - Changes - Centre for the Arts - Major in Dance,  
Revisions to Minor in Dance, Program Changes and New Courses

Moved by T. Calvert, seconded by J. Tuinman,

"That Senate approve and recommend approval to the Board of Governors the proposal for a Major in Dance and the revisions to the Minor in Dance as outlined below and detailed in S.78-142:

- (1) Major Program in Dance, including
  - i) Lower Division requirements as prerequisites
  - ii) Upper Division requirements for a Major in Dance
  - iii) Additional requirements for the degree
- (2) Changes in requirements for a Minor in Dance, including
  - i) Lower Division requirements as prerequisites
  - ii) Upper Division requirements for a Dance Minor
- (3) New Courses:
  - i) FPA.122-3 - Contemporary Dance I
  - ii) FPA.123-3 - Contemporary Dance II
  - iii) FPA.125-3 - Structural Approach to Ballet
  - iv) FPA.225-3 - Ballet for Modern Dance
  - v) FPA.423-4 - Directed Studies in Choreography
  - vi) FPA.425-3 - Dance Analysis
  - vii) FPA.429-5 - Directed Studies in Dance Research
- (4) Concomitant changes arising from Major in Dance
  - i) Changes in course titles, credits, vectors, statement, FPA.320, 321, 420, 421
  - ii) Changes in Minor
    - FPA.120 - prerequisite statement
    - FPA.121 - prerequisite statement
    - FPA.220 - title change
    - FPA.221 - title change."

E. Alderson and I. Garland were seated to respond to questions in connection with the proposal.

Responding to a question raised by D. Frydenlund, E. Alderson advised that the creation of a B.F.A. degree may be a possible eventual development for programs in the Centre for the Arts which would be more professionally oriented and more intensive than the degree program presently before Senate.

Question was called, and a vote taken.

MOTION CARRIED

Paper S.78-147 - Changes - Canadian Studies Program -  
2. Restriction on Availability of Courses

Moved by N. Reilly, seconded by T. Calvert,

"That Senate approve and recommend approval to the Board of Governors of the addition of the restriction 'with the approval of the Program Director' to the following courses listed for Canadian Studies credit:

Department of Archaeology

- ARC. 360-5 - Indian Cultures of North America
- ARC. 475-5 - North America - Arctic
- ARC. 476-5 - North America - Northwest Pacific

Department of Languages, Literatures and Linguistics

- FREN 480-2 - Seminar I
- FREN 481-2 - Seminar II

Department of Sociology and Anthropology

- S.A. 486-4 - Indians of the Pacific Northwest
- S.A. 487-4 - Indians of the Eastern Woodlands and Plains
- S.A. 488-4 - Boreal Indian Groups

Footnote: By mistake, the same restriction was recommended and approved for the course GEOG 469-5, the North American "Middle North" by SCUS at its meeting on October 24, 1978. This action was cancelled by SCUS at its meeting on November 7.

On a point of information, R. Carlson sought information on what percentage of Canadian content a course must have to be included in the Canadian Studies Program. T. Calvert responded that the content should be primal and foundational to the course but that no fixed percentage is established.

Moved by R. Carlson, seconded by R. Brown,

"That ARC. 360-5, ARC. 475-5, ARC. 476-5 and S.A. 486-4  
S.A. 487-4, S.A. 488-4 be removed from the motion."

T. Calvert spoke in favor of the amendment noting that the courses would remain in the calendar for the Canadian Studies Minor but would not carry the comment "with approval of the Program Co-ordinator".

Question was called on the amendment, and a vote taken.

AMENDMENT CARRIED

Question was called on the motion as amended, and a vote taken.

MOTION AS AMENDED CARRIED

q) Paper S.78-150 - Changes - Chemistry - New Course

Moved by N. Reilly, seconded by K. Rieckhoff,

"That Senate approve and recommend approval to the Board of Governors, as set forth in S.78-150, the new course CHEM 465-3 - Electrochemistry."

- Note:
1. Subject to the approval by senate and the Board of Governors of this course, the Senate Committee on Undergraduate Studies has approved waiver of the time-lag requirements in order that this course may be offered in the Summer semester 79-2.
  2. In the light of the concerns in some quarters as to the mode of instruction to be employed in the course, the Senate Committee on Undergraduate Studies undertook to review the course in one year's time.

Due to concerns of the student representatives on the Senate Committee on Undergraduate Studies and the concerns of the Chemistry Student Society, the proposed mode of instruction in certain of the offerings of this course by means of a combination of tapes and tutorials was the subject of considerable discussion by the Senate Committee on Undergraduate Studies. When offered in this mode the course will have 12 components, for each of which there will be a tape of up to 45 minutes plus written material to be studied by the students. The students will cover roughly one component per week, would meet for 2 hours per week with the instructor, do weekly assignments and have regular quizzes. As a result, the Senate Committee on Undergraduate Studies concluded that the instructional methods to be employed when Dr. Lower conducts the course would be quite effective with the students who elected to take the course. In this connection, it should be noted that the course is not a required course for any program.

With regard to the appropriateness of the 3-0-0 vector, it was noted by the Committee that the course may be offered in the traditional lecture mode as well as in the audio-tutorial mode. Consequently, while recognizing that the 3-0-0 vector will not be an accurate description of the course for some of the offerings of the course, the Committee found the proposed vector an acceptable description.

Responding to questions raised by D. Frydenlund, T. Wells noted that CHEM 465-3 was an elective course and that its introduction would not require additional funding. T. Arrott expressed concern about the effect on the students because of the reduced direct contact with the professor. J. Gingerich received confirmation from D. Birch that the course would be offered in the traditional method from time to time. K. Reickhoff commented that Senate has not normally involved itself with the method in which a course is presented, that it was a departmental responsibility to supervise how their courses are offered and evaluate their effectiveness from the input received. D. Birch noted that course would be reviewed by the Senate Committee on Undergraduate Studies in one year's time.

Question was called, and a vote taken

MOTION CARRIED

(Secretary's Note - All papers provided for information were accepted by Senate.)

ii) Senate Graduate Studies Committee

a) Paper S.78-157 - Deletion of Graduate Courses

Moved by J. Wheatley, seconded by K. Rieckhoff,

"That Senate approve, and recommend approval to the Board of Governors, as set forth in S.78-157, the deletion of the following courses from the Graduate calendar:

BISC 800  
BISC 801  
BISC 812  
BISC 813  
BISC 831."

Question was called, and a vote taken.

MOTION CARRIED

b) Paper S.78-158 - Proposed M.Sc. Program in Geography

Moved by J. Wheatley, seconded by R. Brown.

"That Senate approve, and recommend approval to the Board of Governors, as set forth in S.78-158, that an M.Sc. Program in Geography be offered in the Faculty of Science."

Professor M. C. Roberts was seated to respond to questions.

D. Birch noted that the proposal would require the approval of the Universities Council as constituted a new program under council procedures.

Question was called, and a vote taken.

MOTION CARRIED

iii) Senate Committee on Agenda and Rules.

a) Paper S.78-159 - Delegation of Authority to SCUS - Reporting in a Summary Form to Senate, Ratification by Board

"That Senate endorse, and recommend acceptance by the Board of Governors for its ratification requirements, the proposed summary procedures for reporting actions taken by SCUS under its delegated authority, - to Senate for information, and the Board for ratification."

Speaking in opposition to the motion, T. Arrott expressed his opinion that the major function of Senate was to oversee the academic side of the university and to do this must be provided with a complete picture of changes taking place or proposed. J. Weikam felt the information made available to Senators would be satisfactory and would enable Senate to exercise appropriate control. T. Calvert commented that changes receive close scrutiny at several levels before presentation to Senate and, for minor adjustments, Senate did not require the complete backup detail.

Moved by D. McMillan, seconded by D. Hauka.

"That the motion be tabled until the next Senate meeting."

D. Birch ruled that the motion was a motion to postpone.

Question was called on the motion to postpone consideration, and a vote taken.

MOTION TO POSTPONE  
CONSIDERATION FAILED

H. Weinberg requested confirmation that after circulation of the information sheets to Senators opportunity existed to withhold this type of action taken by the Senate Committee on Undergraduate Studies until it had been discussed and approved by Senate. H. Evans stated that the intent would be that actions taken by SCUS would stand subject to ratification by the Board. Senate could instruct SCUS not to repeat an action but, normally, would not interfere but allow SCUS to operate within the terms of the powers delegated to it; obviously if there were a serious oversight or error steps would be taken to rectify it.

Moved by H. Weinberg, seconded by P. Palmer.

"That such actions be reported in a summary form to Senate at its next meeting and the Board for ratification, unless there is a specific motion by Senate on an information item to not approve or transmit that item to the Board."

K. Rieckhoff spoke against the amendment stating that the existing Rules of Senate provide for suspension of the rules to enable Senate to take unique action if required. J. Wheatley felt the amendment would enable discussion to take place on items about which Senators would not be fully informed.

Question was called on the amendment, and a vote taken.

AMENDMENT FAILED

Question was called on the main motion, and a vote taken.

MAIN MOTION CARRIED

6. REPORTS OF FACULTIES

There were no reports from Faculties.

7. OTHER BUSINESS

There was no other business.

8. NOTICES OF MOTION

There were no notices of motion.

9. INFORMATION

The assembly recessed briefly at 8:39 P.M. prior to moving into Closed Session.

H. M. Evans  
Secretary