# SIMON FRASER UNIVERSITY 

## MEMORANDUM

| To: | Senate | From: | J. Munro, Chair <br> Senate Committee on <br> Academic Planning |
| :--- | :--- | :---: | :--- |
| Subject: | Undergraduate Curriculum <br> Changes - Faculty of Applied Sciences | Date: | November 20, 1992 |

Action undertaken by the Senate Committee on Academic Planning and the Senate Committee on Undergraduate Studies gives rise to the following motion:

Motion: "that Senate approve and recommend approval to Board of Governors, as set forth in S.92-66 the undergraduate curriculum revisions for the Faculty of Applied Sciences as follows:
$\begin{array}{lll}\text { i) } & \text { S.92-66a } & \text { Department of Communication } \\ \text { ii) } & \text { S.92-66b } & \text { School of Computing Science } \\ \text { iii) } & \text { S.92-66c } & \text { School of Engineering Science } \\ \text { iv) } & \text { S.92-66d } & \text { School of Kinesiology." }\end{array}$


## S.92-66a

# Department of Communication Summary of Undergraduate Curriculum Revisions 

SCUS Reference: $\quad$ SCUS 92-28, SCUS 92-45
SCAP Reference: SCAP 92-38a

1. New Extended Minor in Communication
2. New course:

CMNS 260-3 Introduction to empirical communication research methods

For Information:
Acting under delegated authority of Senate, SCUS approved course changes as detailed in SCUS 92-28.

CMNS 362-4 Change of prerequisite
CMNS 302-4 Renumbered to CMNS 401 with revision to title, description, and prerequisite
CMNS 210-3 Change of prerequisites
CMNS 333-4 Change of prerequisite
CMNS 353-4 Change of prerequisite
CMNS 446-4 Change of prerequisite

## SIMON FRASER UNIVERSITY

## MEMORANDUM



Background:
Currently sentents may pursue a Bachelor of Arts by taking too Extended Minors rather than a regular major and minor. While a number of departments have articulated an Extended Minos: program, we had not previously done so. However, in response to requests from several students, we would now like to do so.

As earlier version of this proposal was approved by our. department's Undergraduate Curriculum Committee, and subsequently by the Faculty of applied Sciences Undergraduate Curriculum Committee, subject to approval by the Faculty of Arts. Intelally, in a memo of June 25, 1992, Associate Dean of Arts Dr. Clyde reed conveyed that his Faculty had reservations about the original proposal. I subsequently met with Dr. Read and his colleagues on the arts JCC on August 6, where we resolved this problem: the difficulty arose from the fact that our department's initial proposal did not clearly include all the iower-cilvision requirements which wound be applicable to our majors (an amblgalcy arising from the fact that by contrast with many Arts departments, our graduation requirements for majors de not distinguish between lower and upper division requirements). however, the Senste-approved rules for the Extended Minor are quite clear: The Extended Minor must comprise the lower-division regazements for majors, and the upper-division retirements for minors. D: Reed and ins colleagues indicated that if all the "external" or "breadth" requirements for our majors (as listed on page 70 of the 1992193 calendar) were included in the Extended Minor, then our proposal would be fully acceptable and could come into effect immediately.

Accordingly, could you please permit eligible students to take an Extended Minor in Commination subject to the following requirements:

Admission requirements:

* Completion, with a grade of C- or higher, of CMNS 110, 130 and four courses in Cons at the 200 level, including at least one course from each of the Department's areas of concentration (Media, Technology science, Policy). In addition, a minimum CGPA or transfer GFA of 2.25 is a prerequisite for acceptance to this program.

Graduation Requirements:

- Completion of the abovementioned si: courses, totalling 18 lower level credit hours.
* Completion of a course in baste science or social science methods, i.e. one of CMNS 250 (when taught as introduction to empirical research in communication, CMNS 260 (subject to senate approval of this course, or one of the course offerings in other departments, as approved by the Department of Communication. This course should be taken prior to CMNS 301-4, CMNS 261-3, CMES 362-4, or CNNS 363-4.
* Completion of one of CMNS 251-3, 301-4, 362-1 or 363-4.
* At least four upper level courses in Communication.
(Attention is drawn to the fact that some upper level Communication courses have lower level prerequisites.) Normally, no more than one of these upper level Commalcation courses may be any of directed study. field placement or special topics for credit towards the course requirements for an Extended Minor in CONS.

1. Calendar Information

Department: Communication Abbreviation Code: CMNS Course No: 260 Credit Hours: 3 Vector: 2-1-0

Title of Course: Introduction to empirical communication research methods

## Calendar Description of Course:

An introduction to empirical research methods in diverse traditions of communication enquiry. Some methods recognize communication as everyday interactions; others analyze communication as a process; still others blend traditional scientific empiricism with analytical and critical methods derived from the arts and humanities. Topics include: paradigms, conceptualizing and operationalizing research, sampling, interviews, surveys, unobtrusive observation, content analysis, and the role of statistics in communication research.
Nature of Course: Lecture-Tutorial
Prerequisites (or special instructions): CMNS 110 or CMNS 130 (Students who have taken CMNS 250 when taught as "Introduction to empirical communication research methods" may not take CMNS $\mathbf{2 6 0}$ for further credit.)

What courses), if any, is being dropped from the calendar if this course is approved: none
2. Scheduling

How frequently will the course be offered? Once a year until the demand exceeds capacity; then twice a year.
Semester in which the course will first be offered? It was offered as a "special topics" course (CMNS 250 ) in $91 / 3$ \& $92 / 2$ and will be offered again as CMNS 250 every fall until the course is approved as a regular course.
Which of your present faculty would be available to make the proposed offering possible? Richards and Murray
3. Objectives of the Course (rationale)

We have a number of courses in which it is useful for the students to have some background in empirical research methods. We have experimented with a combination of Statistics courses and methods courses offered in other departments, but we have found this combination impractical. The prerequisites have proven to be an effective barrier to our students, and courses offered by other departments are aimed at different audiences. We want our students to have some exposure to the research methods and issues they are likely to encounter in other courses in Communication, and as they attempt to make sense of the literature they read in the course of doing their own research. We see this course as the first step our students take towards becoming literate in research techniques. We are considering the possibility of making this course a requirement for CMS Majors.
4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:
Faculty: none
Staff: TA's will be required
Library: two or three books will be requested
Audio Visual: none
Space: none
Equipment: The Assignment Lab will be used for some aspects of this course. Depending on enrollment, more spaces will be required.
5. Approval


SCUS 73-34b: (When completing this form, for instructions see Memorandum SCUS 73-34a. attach course outline).

## S.92-66b

# School of Computing Science Summary of Undergraduate Curriculum Revisions 

SCUS Reference:<br>SCUS 92-29<br>SCAP Reference:<br>SCAP 92-38b

1. Changes to Joint Major in Information Systems in Business Administration and Computing Science.
2. Changes to upper division requirements for Majors

# Simon Fraser University <br> MEMORANDUM 

To: Faculty of Applied Science<br>Undergraduate Curriculum Committee

Subject: BUS-CMPT Joint Major Changes

From: Robert D. Cameron
Director of Undergraduate Programs Computing Science

Date: September 22, 1992

Concomitant to the CMPT curriculum changes put forward in my memo of Spetember 16, 1992, certain changes are also required to the proposed Joint Major in Information Systems in Business Administration and Computing Science. Rather than modifying that proposal-which is already on its way to SCUS-BUS has asked that we approve a separate change to the Joint Major proposal. BUS has informally given their blessing to these changes.

Here is the proposed change to the upper division CMPT requirements of the BUS-CMPT Joint Major program.

From:
IS Major Requirement
Required CMPT courses: CMPT 320-3 (Social Implications of a Computerized Society), CMPT 354-3 (File and Database Structures), CMPT 370-3 (Information System Design).

## Depth Requirement

9 credit hours in a concentrations other than IS [Information Systems].
Breadth Requirement
6 credits in two concentrations other than IS or the concentration chosen for the depth requirement.
Note that the following two courses must be taken as part of the above 15 credit hours: CMPT 300-3 (Operating Systems I) and CMPT 307-3 (Data Structures).

To:

## IS Major Requirement

Required CMPT courses: CMPT 320-3 (Social Implications of a Computerized Society), CMPT 354-3 (File and Database Structures), CMPT 370-3 (Information System Design).
Breadth Requirement
Required CMPT courses: CMPT 300-3 (Operating Systems I), CMPT 307-3 (Data Structures.
Depth Requirement
9 credit hours of additional upper division CMPT courses, excluding CMPT 301-3 (Information Systems Management). At least one of the courses must be numbered CMPT 400 or above.

Rationale: These changes reflect corresponding changes in the CMPT Majors program. The exclusion of CMPT 301 is because of overlap problems with BUS courses.

# Simon Fraser University <br> MEMORANDUM 

To: Faculty of Applied Science
Undergraduate Curriculum Committee

Subject: CMPT Curriculum Changes

From: Robert D. Cameron
Director of Undergraduate Programs Computing Science

Date: September 16, 1992

Computing Science is proposing the following changes to its upper division requirements for Majors.

From:

## Depth Requirement

Concentrations consisting of three courses from each of two areas shown in table I must be completed. ( 18 semester hours)

## Breadth Requirement

One course each in three additional areas of table I must be completed. ( 9 semester hours)
CMPT 300-3 (Operating Systems I), CMPT 307-3 (Data Structures and Algorithms) and CMPT 354-3 (File and Database Structures) must be included within the courses used to satisfy depth and breadth requirements.

To:

## Breadth Requirement

One course each in five areas of Table I must be completed. These courses must include CMPT 300-3 (Operating Systems I), CMPT 307-3 (Data Structures and Algorithms) and CMPT 354-3 (File and Database .Structures). ( 15 semester hours.)

## Depth Requirement

Four additional courses from Table I must be completed in the five areas chosen to satisfy breadth requirements. At least two of these courses must be numbered CMPT 400 or above. ( 12 semester hours)

Remarks: The breadth requirement is unchanged, but has been reworded. The proposed depth requirement is consistent with the current requirement in that four Table I courses (beyond the breadth courses) must still be completed. The only difference is that the current requirement restricts these four courses to consist of two courses each in two areas. Thus, the essence of the proposed change is to remove the latter restriction.


Rationale: The current depth requirement has been the source of considerable difficulty for students as they near graduation. The typical problem arises when a student in his final semester needs one more course in a depth area. Often there are only one or two possible courses s/he can take, neither of which is offered in his final semester. To avoid this situation requires considerable planning on the part of the student and may preclude him or her from choosing certain depth areas. Even if a student has undertaken such planning, the plans may go awry if we cancel or reschedule a course. These problems are only going to get worse with increased enrollments and reduced course offerings because of budget cutbacks. The proposal eliminates the restrictions on the final course a student can use to fulfill depth requirements, allowing any currently offered course from the five chosen breadth areas to be used. The requirement of at least two 400 -level courses ensures that at least some topics are considered at an advanced level.


# School of Engineering Science Summary of Undergraduate Curriculum Revisions 

SCUS Reference:
SCAP Reference:

SCUS 92-30
SCAP 92-38C

1. Change title of 'Internship' program to read 'Co-op' program, and change all occurrences of Internship to Co-op or Co-operative Education, as appropriate, under the School of Engineering Science program description and course descriptions for ENSC 195, 196, 295, 296, 395, 396, and 499.
2. Editorial change to address concerns of Senate regarding student semester course loads.
3. Electronics Option: Switch the CMPT elective in semester 5 with ENSC 321-4 Electronic Design II in semester 7.

## For Information:

Acting under delegated authority of Senate, SCUS has approved the following revision as detailed in SCUS 92-30:

Delete the prerequisite of ENSC 105 for ENSC 439.

Change all references of Internship to Co-op.

## Rationale:

This change will bring our program more in line with other co-op operations on campus. But, more importanty, the move of some eastern universities (U. of Toronto, Western and others) to establish internship programs which involve 12-16 months work experience, has caused confusion with our type of program. There will be no change to the requirements; this is strictly an editorial change.

## Calendar Changes Required:

Change all occurrences of Intersship to Co-op or Co-operative Education, as appropriate, under the School of Engineering Science program description and courses descriptions for ENSC 195, 196, 295, 296, 395, 396, and 499.

Editorial change to address concerns of Senate regarding student semester course loads.

## Rationale

We were requested by Senate (see attached memo of 17 December 1991 and response of 12 Feb. 1992) to change the reference regarding student semester course load. To address this concern, an editorial change has been made under the B.A.SC. requirements.

## Calendar Change Required:

FROM (page 75 under B.A.Sc. requirements):
...These are listed below on a semester-by-semester basis although there is no strict requirement to follow the sequence of these typical programs. However, any semester's registration less than 15 semester hours must be approved by the Director and students departing form these sequences must be careful about scheduling and prerequisite problems they may face in subsequent semesters.

## TO:

...These are listed below on a semester-by-semester basis. The program requirements are structured in such a way that the program can be completed in eight semesters of full time study. Although there are no strict requirements to follow the sequence of these typical programs, students taking less than the designated load may face scheduling and prerequisite problems in subsequent semesters. Failure to take those courses identified with an asterisk (") in the designated semester will almost certainly lead to such problems. Note that any semester of registration with less than 15 semester hours of credit requires prior approval by the Director.

Electronics Option: switch the CMPT elective in semester 5 with ENSC 321-4 Electronic Design II in semester 7.

## Rationale:

There is a two year gap between when the students take ENSC 222 Electronic Design I and when they take the next course in the series, ENSC 321. Current experience has shown the students have forgotten much of that background during that period. Also, several upper year courses are finding the students need more of a background in transistor operation which they receive in ENSC 321.

## Calendar Change:

## ELECTRONICS ENGINEERING - Courses and Typical Schedule

FROM:

## Semester Five

Cml III-3 third complementary studies elective
Copt I-3 first Computing Science elective
*CMPT 390-3 Digital Circuits and Systems
*CMPT 391-4 Computer Design Workshop
*ENSC 105-1 Engineering Communications V
*ENSC 382-4 Linear Systems II
MATH 252-3 Vector Calculus

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21 \text { semester hours credit }
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## Semester Six

Copt II-3 second Computing Science elective
*ENSC 106-1 Engineering Communications VI
ENSC 301-3 Engineering Economics
*ENSC 327-4 Communication Systems
*ENSC 385-4 Real-Time Systems
*PHYS 324-3 Electromagnetics
Scie II-3 second science elective ${ }^{(3)}$
21 semester hours credit

## Semester Seven

Ens 1-4 first Engineering Science elective ${ }^{(4)}$
Ens II-4 second Engineering Science elective ${ }^{(4)}$
*ENSC 107-1 Engineering Communications VII
*ENSC 300-3 Engineering Design and Management
*ENSC 321-4 Electronic Design II
ENSC 498-3 Engineering Science Thesis Proposal
Scie III-3 third science elective ${ }^{(3)}$
22 semester hours credit
TO:
Semester Five
Cmpl III-3 third complementary studies elective
*CMPT 390-3 Digital Circuits and Systems
'CMPT 391-4 Computer Design Workshop
*ENSC 105-1 Engineering Communications V
1 "ENSC 321-4 Electronic Design II
*ENSC 382-4 Linear Systems II
MATH 252-3 Vector Calculus1
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ENSC 301-3 Engineering Economics
*ENSC 327-4 Communication Systems
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Ensc II-4 second Engineering Science elective ${ }^{(4)}$
*ENSC 107-1 Engineering Communications VII
"ENSC 300-3 Engineering Design and Management
ENSC 498-3 Engineering Science Thesis Proposal
Scie III-3 third science elective ${ }^{(3)}$
1
21 semester hours credit
21 semester hours credit

# School of Kinesiology Summary of <br> Undergraduate Curriculum Revisions 

## SCUS Reference: <br> SCUS 92-31

SCAP Reference:
SCAP 92-38d

1. Change of requirements for Kinesiology Majors
2. Change of upper level electives
3. Change of upper division credit requirements for Kinesiology honors

For Information:
Acting under delegated authority of Senate, SCUS has approved the following revisions as detailed in SCUS 92-31

Change of prerequisites for KIN 343, 375, 460 and 461.

To: Faculty of Applied Sciences Undergraduate Curriculum Committee

Subject: Calendar Changes For Discussion At FAS UCC Meeting On July 23

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From: Craig Asmundson
UCC Chairperson
School of Kinesiology
Date: July 16/92

For INFORMAATION.
*1. Proposal: For Kin 343, 375, 460 and 461, in addition to other prerequisites for each of these courses, the prerequisites should read Kin 105 or 205 as shown below:

Kinesiology 343 - prerequisites: KIN 105 or 205 (formerly KIN 100), KIN142 and 143

Kinesiology 375 - prerequisites: KIN 105 or 205 (formerly KIN 100), KIN142 and 143

Kinesiology 460 - prerequisites: BISC 201, KIN 105 or 205 (formerly Kin 100), KIN 142 and 90 credit hours

Kinesiology 461 - prerequisites: KIN 105 or 205 (formerly Kin 100), KIN 142 and 90 credit hours

Justification: When Kinesiology majors apply for these courses via telephone registration, they get rejected from these courses because they don't have KIN 105 on their transcript. In fact they have taken a higher level physiology course, KIN 205.
\#2. Proposal: Change the upper division credit requirements for Kinesiology Majors from 54 credits to 45 credits so that the appropriate section of the Calendar reads as follows:
"Out of the minimum of 120 credits that are required for graduation with a BSa Kinesiology, at least 45 of those credits must be upper division credits.

Justification: This was the School of Kinesiology upper division credit requirement until the 1989/90 Calendar when the upper division credit requirement for Kinesiology majors was increased to 54 credits. The upper division credit requirement for almost every department at SFU, across all faculties, is 45 credits. Requiring 45 upper division credits rather than 54 upper division credits gives Kinesiology students more flexibility in their choice of courses.
*3. Proposal: Under the title, "Upper Division Electives", the Calendar currently reads:
"The remaining 18 hours are electives to be chosen from courses offered by any discipline in the University. At least 12 of these hours must be from courses numbered. 300 or above."

This should be changed to:
"The remaining 18 hours are electives to be chosen from courses offered by any discipline in the University. At least 3 of these hours must be from courses numbered 300 or above."

Justification: This follows from proposal \#2. The number of upper division required credits has been reduced by 9 .
\#4. Proposal: Change the upper division credit requirements for Kinesiology honors from 72 credits to 60 credits so that the appropriate section of the Calendar reads as follows:
"Of these 132 credit hours for graduation, a minimum of 60 credits must be upper levels (with a minimum of 54 in Kinesiology)."

Justification: This was the upper division credit requirement for the honors program in the School of Kinesiology until the 1991/92 Calendar. The upper divisio credit requirement for the honors program in almost every other department at SFU across all faculties, is 60 credits. Requiring 72 upper division credits for the hono program is too stringent.

