# SIMON FRASER UNIVERSITY

### MEMORANDUM

S.82.45

ToSenate	From Office of the Dean of Graduate Studies
Subject. Sub	Date February 2, 1982

MOTION: That Senate approve and recommend approval to the

Board, as set forth in S.82-45

Graduate Courses, CMPT 601-5 and 602-5.

These courses were approved by the Executive Committee, Senate Graduate Studies Committee at its meeting on January 18, 1982.

Bryan P. Beirne Dean of Graduate Studies.

- New

mm/

## SIBON FRASER UNIVERSITY

### New Graduate Course Proposal Form

## CALENDAR INFORMATION:

Department: Computing Science	Course Number: 601
Computing Science Education I	
Description: please see attached	
Credit Hours: 5 Vector: 2-2-2	Prerequisite(s) if anv: see attached
ENROLLMENT AND SCHEDULING:  Estimated Enrollment: When will the course f  How often will the course be offered: bi-annually	
JUSTIFICATION:  This course is necessary for the M.Ed. with	emphasis in Computer
Education, a recently introduced specializati	·
Education, a receivery more deader operations	
RESOURCES:	t mumbers of the Computing Science Der
Which Faculty member will normally teach the course: MOS	
What are the budgetary implications of mounting the course 3 Apple micro-computers, 4 disk drives, 1 t	
	aute, i proces, i princes
(see attached for fall-back position)	NAME .
Are there sufficient Library resources (append details):	yes
Appended: a) Outlins of the Course b) An indication of the competence of the Facu c) Library resources	Ity member to give the course.
7)	77/15/
Approved: Departmental Graduate Studies Committee: 1 11 5	
Taculty Graduate Studies Committee: 1. Ro	Date: 7/12/8/
Faculty: P.J. Beautinghain	Date: 7/12/81
Senate Graduate Studies Corplitice: ( Nichtie	there mass. Jun 19/82
Senate:	

CMPT 601 Course Proposal

DESCRIPTION: This course will introduce graduate students in Education to the basics of computing science. Emphasis will be placed on the use of microcomputers. Topics will be programming micro-computers; tile handling; microcomputer hardware; word processing; graphics; social, economic and legal implications.

PREREQUISITES: Graduate status in Education. If the student has an adequate background in computing, this course must be replaced by other Computing Science undergraduate or graduate courses.

### Course Outline

Title: Computing Science Education 1

This course will introduce graduate students in Education to the basics of computing science. Emphasis will be placed on the use of micro-computers.

Topics: Introduction

Programming micro-computers
The programming language PASCAL

File handling

Micro-computer hardware

Word-processing

Graphics

Social, economic and legal implications

#### Recommended Reading:

APPLE Reference Manual

Boulding, K., Problem Solving using Pascal, 1977

Papert, S., Mindstorms, 1979

Zaks, R., Microprocessors: From Chips to Systems, 1977

Artwick, B., Microcomputer Interfacing, 1980

## STHON PRASER UNIVERSITY.

## New Graduate Course Proposal Form

# CALENDAR INFORMATION:

Department: Computing Science	Course Number: 602
Computing Science Education II	
please see attached	
	·
Credit Hours: 5 Vector: 3-3	Prerequisite(#) if mnv:see attached
ENFOLEMENT AND SCHEDILLING:  Facinated Enrollment: When will the could often will the course be offered: bi-annual.	
This course is necessary for the M.Ed.	with emphasis in Computer
Education, a recently introduced special	fization in the M.Ed. program.
What are the budgetary implications of mounting the	Most memoers of the Computing Science bept.
(see attached for fall-back position)	
Are there sufficient Library resources (append detail	ls):
Appended: a) Outline of the Course b) An indication of the competence of th c) Library resources	
Approved: Departmental Graduate Studies Committee:  Faculty Graduate Studies Committee: P.J.  Faculty: P.J. Brauley  Senate Graduate Studies Committee: Chic	Date: 7/12/5/ Date: 7/12/5/ Date: 7/12/8/ Date: 7/12/8/ Date: 1/1/1/1/ Date: 1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/
Senate:	the state of the s

DESCRIPTION: This course introduces some formal topics in Computing Science to the graduate student in Education. Topics include discrete mathematical structures; models of computing; data structures; formal languages and algorithms. Also, methods will be introduced for the design and implementation of large programs using structured modular design.

PREREQUISITES: CMPT 601-5 or consensus of instructor(s).

A CAN THE PROPERTY OF THE PROP

For CMPT 601-5 and 602-5

Competence of the Faculty member to give this course:

The courses are, in their content, on the level of undergraduate courses in Computing Science. Therefore many faculty members and sessional lecturers in the Department are qualified to teach these courses.

### Library resourses:

The courses require the same library resources as undergraduate courses in Computing Science. Since the size of the courses is relatively small compared to the undergraduate courses, additional library resources are not necessary.

In case the proposed Budgetary and Space Requirements cannot be fulfilled by the University, the Graduate Studies Committees of the Computing Science Department and the Education Faculty have agreed to the following points:

- The Faculty of Education will make available funds for a Sessional Lecturer (overload faculty member) to be appointed in cooperation with the Department of Computing Science to staff the courses, whenever offered.
- 2. The Faculty of Education will make available the necessary equipment and lab facilities.
- 3. The Faculty of Education will make available lab instructor's time as needed.

It should be pointed out that in the eyes of both Committees, this fall-back position is only second to the supply of the proposed budgetary and space requirements. But in view that the Faculty of Education needs these courses for its new M.Ed. program with computer emphasis and the Department of Computing Science is incapable of delivering the courses with its present resources, we present this compromise.



APR 27 1982

 REGISTRAR'S OFFICE MAIL DESK

#### EDUCATION EDUCATION EDUCATION EDUCATION

To : Dr.Beirne, Dean Graduate Studies From : Jaap Tuinman, Dir. Grad. Programs

Date : April 24, 1982

Re : MPT 601,602

I am surprised to see that the above courses jot stranded in SCAR. Perhaps the comments below will help matters to get underway again.

The phraseology "recently introduced specialization in the M.Ed.Program" is unfortunate and indeed perceived correctly by SCAR as worthy of attention. The facts are innocent. One of the, Senate Approved, specializations in the Master's program in our Faculty is the Educational Practice Program. Depending on a student's specific curriculum area (.e.g. Reading, ESL, Learning Disabilities) special adaptations are allowed within the general program framework. "Computers in Education" is one of these curricular emphases approved by the Faculty. (Incidentally, Senate approved the one Education course necessary for this emphasis: Educ. 851, Computer Based Learning.)

The 1/2 lab instructor is only needed for the semester the 601 Or 602 is offered.
The courses will be offered first in Fall 82 (601) and Fall 83 (602).

1 consent:consent replaces consensus

The CMPT people better answer the question about relationships between their undergrad, and these courses. From our perspective their undergraduate courses do not fulfill our scudents' needs.

cc.Mr.H.Evans M.NcGinn Prof.R.Jones

### SIMON FRASER UNIVERSITY

#### **MEMORANDUM**

JoDr. B. P. Beirne	FromHMEvans
Deam of Graduate Studies  New Course Proposals  Subject CMPT 601-5, 602-5	Date. April 9, 1982

The Senate Committee on Agenda and Rules decided to refer back to the Senate Graduate Studies Committee the new course proposals CMPT 601-5 and 602-5.

The Committee considered that it would be inappropriate to submit these items to Senate until the following issues had been addressed:-

- status of the "recently introduced specialization in the M.Ed. program" (i.e. Computer Education)
- requirement for 1/2 lab instructor for a course scheduled only every other year
- sequence of initial offering does not permit prerequisite for CMPT 602 to be fulfilled before first offering
- level of course in relation to lower level undergraduate CMPT courses
- the prerequisite for CMPT 602 should presumably refer to consent of instructor(s) rather than "consensus" of same

The first of the above items is the primary concern.

- cc. J. Tuinman, Education
  M. McGinn, Asst. Registrar
  Graduate Studies
- P.S. Further to our telephone call, discussion has been held with Dr. Tuinman who will respond and submit it through you to me.