SIMON FRASER UNIVERSITY S.78-158 memorandum				
ToSENATE	From JON WHEATLEY DEAN OF GRADUATE STUDIES			
Subject. PROPOSED M.SC. PROGRAM IN GEOGRA	APHY Date NOVEMBER 20, 1978			

MOTION: "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."

Note: This has been recommended by the Department of Geography, the Faculty of Arts and the Faculty of Science (papers attached).

- Attached: 1) Revised Faculty of Arts Calendar entry;
  - 2) Revised Faculty of Science Calendar entry;
  - 3) Memoranda from the Department of Geography,
  - the Faculty of Arts and the Faculty of Science.
- Note: The M.Sc. program in Geography put forward here is not a new program in that no new courses and no new faculty will be required. It simply permits a student to follow an existing route in the Department of Geography to the Master's degree but allows a student following that route to receive an M.Sc. degree. No additional resources are required.

This proposed program was approved by the Senate Graduate Studies Committee on November 20, 1978.

Jon Wheatley

In the Faculty of Science Calendar Entry.

**GEOGRAPHY PROGRAM** 

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Location: Room 7123 - Classroom Complex

Telophone: 291-3321

Participating Faculty:

M.C. Roberts B.Sc. (Lond.), M.A. (Tor.), Ph.D. (Iowa), F.R.G.S., Associate Professor & Chairman (Fluvial Geomorphology, Urban Hydrology) C.B. Crampton B.Sc., Ph.D. (Brist.), Professor (Geology; Pedology) .F. Cunningham B.A., M.A., Dip. Fd. (Dunelm), F.R.G.S., Professor (Geomorpholopy: Latin America) E.J. Hickin B.A., Ph.D. (Syd.), Associate Professor (Geomorphology; Hydrology) I. Hutchinson B.A. (L1v.), M.Sc. (McG.), Ph.D. (S. Fraser) Assistant Professor (Biogeography) T.K. Peucker Dr.phil. (Heidel.), Associate Professor (Quantitative Methods; Computer Cartography) R.B. Sagar B.Sc. (Lond.), M.Sc. (McG.), Associate Professor (Climatology: Glaciology) S.T. Wong A.B. (Augustana), A.M. (Yale), Ph.D. (Chic.), Associate Professor (River Rasin Management: Quantitative Methods)

#### Degrees Offered

The Department of Geography offers a program leading to the M.Sc. degree in the Faculty of Science.

#### AREAS OF RESEARCH

The Department takes a special interest in the systematic aspects of physical Geography (geomorphology, biogeography and soils, climatology and glaciology, terrain analysis) and computer cartography. Emphasis is placed on the physical geographical problems of western North America, with particular reference to British Columbia.

A number of areas of research will be pursued in cooperation with other departments. Candidates will be encouraged to take courses in biological sciences, chemistry, mathematics and physics, where these are related to their research interests.

#### ADMISSION

For admission requirements, refer to General Regulations section.

Student should normally hold a B.Sc. degree, or equivalent, in an honors program with at least a good second class standing (3.0 G.P.A.) in Geography or a related discipline; where the candidate's first degree is not in Geography, he/she should have at least 12 semester hours or the equivalent in upper division Geography courses.

Students with a general depree must have 30 semester hours or the equivalent in upper division Geography courses.

#### M.Sc. COMMITTIFE

The M.Sc. Candidate, on being admitted to the Department will work under the guidance of a faculty adviser, pending the choice of a Supervisory Committee. The Supervisory Committee, normally composed of three faculty members, one of whom may be drawn from outside the department, will be chosen by the third semester.

#### b) Quantitative Techniques

This requirement will be satisfied by a student taking GEOG 407, or its equivalent at another institution. Any student lacking this prerequisite will be expected to take the GEOG 407 seminar, which will not form part of the course credits for the M.A. degree. Faculty members who normally teach this course will be responsible for assessing the criteria for satisfactory performance.

At the discretion of the Supervisory Committee, students may be directed to acquire an adequate knowledge of a language which would be relevant to their studies.

The M.A. program consists of two alternative sets of degree requirements.

#### a) Extended Essay Program

Students will be expected to complete 30 credit hours of course work. Under normal circumstances, each candidate will be expected to take the following courses:

#### GEOG 800-3;

#### two of GEOG 802-3, 803-3, 805-3

For the 21 hours of elective credit, a student will be encouraged to take graduate courses outside the Geography Department.

In addition, students will be expected to write two extended essays on the basis of their graduate work and will be required to give an oral defence of each.

#### b) Thesis Program

This program requires a thesis and at least 20 hours of course work which must include GEOG 800-3. Graduate course work in departments outside of Geography will be encouraged.

**Colloquium:** Each M.A. candidate will be expected to present a paper to the Department at a colloquium. This paper should be based on either one of the candidate's proposed extended essays or his/her proposed thesis topic, and should be prepared under the supervision of and to the satisfaction of the candidate's Supervisory Committee.

# M.Sc. PROGRAM

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The Department offers program leading to the M.Sc. degree in the Faculty of Science. For details see the Geography entry in the Faculty of Science section of the calendar.

### Ph.D. Program

#### Admission

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For admission requirements, refer to General Regulations section.

#### **Degree Requirements**

The Ph.D. candidate, on being admitted to the Department, will work under the guidance of a faculty adviser, pending the choice of a Supervisory Committee. The Supervisory Committee, normally composed of three faculty members, one of whom may be drawn from outside the Department, will be chosen by the third semester.



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#### M.Sc. REQUIREMENTS

All graduate students must show competence in methodology and in quantitative techniques, preferably by fulfilling the following requirement before admission:

a) Methodology

This requirement will be satisfied by a student taking GEOG 406, or its equivalent at another institution. Any student lacking this prerequisite will be expected to take the GEOG 406 seminar, which will not form part of the course credits for the M.Sc. degree. Faculty members who normally teach this course will be responsible for assessing the criteria for satisfactory performance.

b) Quantitative Techniques

This requirement will be satisfied by a student taking GEOG 407, or its equivalent at another institution. Any student lacking this prerequisite will be expected to take the GEOG 407 seminar, which will form part of the course credits for the M.Sc. degree. Faculty members who normally teach this course will be responsible for assessing the criteria for satisfactory performance.

At the discretion of the Supervisory Committee, students may be directed to acquire further competence in mathematics and an adequate knowledge of a second language which would be relevant to their studies.

c) Course Work

Students are required to complete a minimum of 20 hours of course work of which, at least 12 hours must be at the graduate level, and must include GEOG 800-3. Students will be encouraged to take courses in the Faculty of Science.

d) Thesis

A student is required to write a thesis. The candidate will prepare a thesis proposal which will be circulated to faculty and resident graduate students and will present this proposal at a Departmental colloquium. In addition, prior to completion of the thesis, the candidate will be expected to present before interested faculty and students, a report on the progress of his/her research. The timing of this report will be selected in consultation with the candidate's Supervisory Committee.

The completed thesis will be judged by the candidates Examining Committee at an oral defence.

### DESCRIPTION OF GEOGRAPHY

### GRADUATE COURSES (GEOG)

- GEOG 800-3 Perspectives on Geography
- OEDG 802-3 Theories and Recent Developments in Physical Geography
- GEOG 807-3 Quantitative Techniques
- GEOG 808-5 Quantitative Techniques
- GEOG 809-5 Theoretical and Quantitative Cartography
- GEOG 811-3 Climatology
- GEOG 812-5 Climatology
- GEOG 813-3 Geomorphology
- GEOG 814-5 Geomorphology
- GEOG 815-3 Biogeography
- GEOG 816-5 Blogeography
- GEOG 853-3 Water Resources
- GEOG 854-5 Water Resources
- GEOG 891-2
- GEOG 892-3 > Directed Readings
- GEOG 893-5
- ŒEDOG 897

M.Sc. Thesis

## SIMON FRASER UNIVERSITY

#### MEMORANDUM

ToDr. Jon Wheatley	From Michael C. Roberts	
Dean	Chairman	
Graduate Studies	Dept. of Geography	
Subject M.Sc. in Geography	Date. October 5, 1978	

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It was the Department of Geography that initiated the present M.Sc. proposal from the Faculty of Science.

Both the Departmental Graduate Studies Committee and the full meeting of the Department support the proposal.

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M.C. Roberts

MCR/mgb

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cc: Dr. W.L. Cleveland, Associate Dean of Arts

OCT - 6 1978 DEAN OF GRADUATE STUDIES OFFICE



## SIMON FRASER UNIVERSITY MEMORANDUM

Dean J. Wheatley	From W.L. Cleveland, Chairman
Graduate Studies	Faculty of Arts Graduate Studies
Subject M.Sc. Geography	Date October 25, 1978

The Faculty of Arts Graduate Studies Committee at its meeting of October 25, 1978 approved in principle the proposal for an M.Sc. in Geography.

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W.L. Cleveland

# SIMON FRASER UNIVERSITY

# MEMORANDUM

To Dr. J. Wheatley	From	J.M. Webster
Dean of Graduate Studies	<b>10</b> 10 1	Dean of Science
Subject <sup>M.Sc.</sup> Geography Programme	Date	1978 09 27

Please find attached the calendar entry for the proposed M.Sc. Geography Programme.

You will note that it is arranged such that (a) the following insertion is entered in the Geography Department section in the Faculty of Arts part of the Calendar:-

#### M.Sc. Programme

The Department offers a programme leading to the M.Sc. degree in the Faculty of Science. For details see the Geography entry in the Faculty of Science section of the calendar.

(b) A full description of the Programme occurs under the heading "Geography Programme" in the Faculty of Science section of the Calendar.

The original total proposal has received full ratification of the Faculty of Science, together with the understanding that this M.Sc. Programme will be part of the Faculty of Science Programme and come under their regulations and procedures.

The latest minor editorial changes to the Calendar entry have also the approval of the Faculty of Science Graduate Studies Committee.

Webster

JMW/mgj

Attachment

cc: Dr. M. Roberts, Chairman Geography Department

cc: Dr. R.C. Brooke, Chairman Faculty of Science Graduate Studies Committee