

SIMON FRASER UNIVERSITY

OFFICE OF THE VICE-PRESIDENT, ACADEMIC

MEMORANDUM

To: Senate

From: J. M. Munro, Chair
Senate Committee on Academic Planning

Subject: Department of Geography

Date: April 10, 1995

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

Motion:

"that Senate approve and recommend approval to the Board of Governors as set forth in S.95 -31 , the proposed

New courses GEOG 718-4 Soil Science
 GEOG 731-4 Hydrology

Deletion of GEOG 721-4 Biogeography of Wetlands
 GEOG 724-4 Measurement and Modelling of Heat
 and Mass Transfer
 GEOG 727-4 Field and Analytical Techniques in
 Geomorphology
 GEOG 730-4 Fossil Landforms
 GEOG 747-4 Transportation
 GEOG 758-4 Heritage Resource Management
 GEOG 761-4 Chronogeography."

J. M. Munro

NEW GRADUATE COURSE PROPOSAL FORMCalendar Information:Department: Geography Course #: GEOG-718-4Title: Soil ScienceDescription: Discussion of special topics in soil science: soil physics, soil chemistry, soil biology and/or forest soils.

Credit Hrs: _____ Vector: _____ Prerequisite(s), if any: _____

Enrollment and Scheduling:Estimated Enrollment: 5 When will the course first be offered: Spring 1995How often will the course be offered: once every 2 yearsJustification:~~This course is required by graduate students carrying out research in soil science.~~Resources:Which Faculty member will usually teach the course: Dr. Margaret G. SchmidtWhat are the budgetary implications of mounting the course: minimal budget required, most lab and field equipment is already available for GEOG 317 and GEOG 417Are there sufficient library resources (append details): yes

- Appended:
- a) Outline of the course
 - b) An indication of the competence of the Faculty member to give the course
 - c) Library resources
- Approved:

Approval:		
Departmental Graduate Committee:	<u>R. Dan Mu</u>	Date: <u>Feb. 22/95</u>
Faculty Graduate Committee:	<u>CPH</u>	Date: <u>Feb 22, 1995</u>
Faculty:	<u>[Signature]</u>	Date: <u>23 Feb 95</u>
Senate Graduate Committee:	<u>[Signature]</u>	Date: <u>March 25, 1995</u>
Senate:		Date: _____

RATIONALE FOR NEW COURSE PROPOSAL

DEPARTMENT OF GEOGRAPHY

GEOG 718-4

RATIONALE

Dr. Margaret Schmidt joined the Geography Department in the fall of 1992 and has established an active research program in the area of soil science. Currently there is no graduate course in the calendar concerning any aspect of soil science. Graduate students working under the supervision of Dr. Schmidt as well as some other graduate students working in related fields, require a graduate course in soil science. It is thus proposed that a new graduate course titled "Soil Science" be created.

Suggested Calender Description

718-4, Soil Science - Discussion of special topics in soil science: soil physics, chemistry, biology, survey, classification and/or use.

Simon Fraser University
Department of Geography

Geography 718-4
M.G. Schmidt
CC 7136, 291-3323

GEOGRAPHY 718-4: SOIL SCIENCE

COURSE OUTLINE

OBJECTIVES

This course provides an advanced treatment of topics in soil science: soil physics, chemistry, biology, survey, classification and/or use. Current soil science research will be emphasised.

READINGS

There is no required textbook for the course; readings will be assigned and made available on reserve in the library.

GRADING

Assignments (4)	40
Seminar Presentations (2)	20
Papers (2)	40

TOPIC OUTLINE

Week	Topic
1	Introduction
2	Soil Formation
3, 4	Soil Physics
5, 6	Soil Chemistry
7, 8	Soil Biology
9, 10	Methods of Soil Analysis
11	Nutrient Cycling
12, 13	Soil Management

Reading List available upon request

MEMORANDUM

W.A.C. Bennett Library, Simon Fraser University
Burnaby, British Columbia, Canada V5A 1S6

Date: January 31, 1994
From: Ralph Stanton (Collections Librarian)
To: Margaret G. Schmidt, Geography (3323)
Re: Library Course Assessment of GEOG 718

Thank-you for your memorandum of January 25. Here is our evaluation of Library resources for:

GEOG 718-4 Soil Science

This course follows on the introduction for the course GEOG 417-4 Soil Science II and uses many of the same monographs and serials. The course enrollment is likely to be about 5 students once every two years. There is no textbook for the course, assigned readings will be made available on Reserve in the Library. The monograph collection was upgraded and added copies made at the time of the May 20, 1993 assessment of GEOG 417. No additional monographs are requested by the instructor.

The instructor tells us that there are no serials which must be added to the collection to support this course. All serials in the bibliography of GEOG 417 were in the collection. The serials collection is adequate for the course.

THERE ARE NO COSTS ASSOCIATED WITH THIS COURSE.



NEW GRADUATE COURSE PROPOSAL FORMCalendar Information:Department: Geography Course #: 731-4Title: HydrologyDescription: This course covers the conceptual and methodological bases of current hydrologic research.Credit Hrs: 4 Vector: seminar/laboratory Prerequisite(s), if any:Enrollment and Scheduling:Estimated Enrollment: 2-6 When will the course first be offered: 95-3How often will the course be offered: each yearJustification:See attached sheet giving "rationale."Resources:Which Faculty member will usually teach the course: R.D. Moore

What are the budgetary implications of mounting the course: _____

The only budgetary implications are additions to the library holdings in hydrology. However, most of these additions should be made in support of the existing Geography 311-4 (Hydrology).

Are there sufficient library resources (append details): _____

- Appended:
- a) Outline of the course
 - b) An indication of the competence of the Faculty member to give the course
 - c) Library resources
- Approved:

Approval:		
Departmental Graduate Committee:	<u>R.D. Moore</u>	Date: <u>Feb. 22/95</u>
Faculty Graduate Committee:	<u>Arthur</u>	Date: <u>25 Feb 95</u>
Faculty:	<u>[Signature]</u>	Date: <u>23 Feb 95</u>
Senate Graduate Committee:	<u>BPCO</u>	Date: <u>March 25, 1995</u>
Senate:		Date: _____

RATIONALE FOR NEW COURSE PROPOSAL

DEPARTMENT OF GEOGRAPHY

GEOG 731-4

RATIONALE:

Dr. Dan Moore joined the Geography Department in the autumn of 1989, and has established an active research program in the area of hydrology. He has had one M.Sc. student graduate under his supervision, and currently acts as senior supervisor for four M.Sc. students. In addition, graduate students supervised by other members of the Geography Department often carry out research for which a knowledge of hydrology is relevant. To meet the needs of these graduate students, Dr. Moore has offered a graduate course in hydrology every year since 1989, either as a Special Topics (Geog 795-4) or as a Directed Readings (Geog 791-4).

It would be advantageous for these graduate students to have on their transcripts a graduate course with hydrology in the title, rather than a "directed readings." It is therefore proposed to create a new graduate course in the Geography program titled "Hydrology."

GEOGRAPHY 731-4: HYDROLOGY

COURSE OUTLINE

OBJECTIVES

This course covers the conceptual and methodological bases of current hydrologic research.

READINGS

The course text is:

Dingman, S.L. 1994. *Physical Hydrology*. Macmillan, New York.

In addition, research articles will be assigned, as per the attached reading list.

COURSE REQUIREMENTS AND GRADING

There will be four assignments, which will stress collection, analysis and interpretation of hydrologic data. Each student will make four seminar presentations, based on topics covered by the assigned readings (see attached list). In addition, each student will prepare a critical review of an area of current hydrologic research.

Assignments (4)	30
Seminar presentations (4)	30
Critical review	40
Total	100

TOPIC OUTLINE

Week	Topic	Activity
1	Introduction	
2	Precipitation	Seminar
3	Soil physics	Laboratory experiment
4	Groundwater	Field exercise
5	Snow hydrology 1	Seminar
6	Snow hydrology 2	Assignment
7	Evapotranspiration	Seminar
8	Soil moisture balance	Seminar
9	Runoff processes 1	Seminar
10	Hydrologic modelling 1	Seminar
11	Hydrologic modelling 2	Assignment
12	Forest management	Seminar
13	Critical reviews	Seminar

MEMORANDUM

W.A.C. Bennett Library, Simon Fraser University
Burnaby, British Columbia, Canada V5A 1S6

Date: 22 February, 1994

From: Ralph Stanton (Collections Librarian)

To: Dan Moore, Geography Department

Re: Library Course Assessment Geog 731-4 Hydrology
(Revision of 13 January, 1994 document)

We have assessed the Library's ability to support GEOG 731, here are the results. This course will enrol five or more students once a year starting 94-3. There is an undergraduate course in the same field which will be able to share much of the material purchased for this course, it is GEOG 419-4 Mass Transfer in the Biosphere.

There are 6 monographs on the reading list of which 4 are not in the library. We need to add these titles at an estimated cost of \$400. All the serials from the reading list are in the collection. The instructor indicates that the journal *Hydrological Processes: An International Journal* should be added, it costs \$350 per year. In addition the instructor estimates that about 2 titles per year should be added from the books published by the International Association for Hydrologic Science at a cost of \$100 per year.

B.C. UNIVERSITY LIBRARY COMPARISON

We have compared our holdings to those of U-VIC and UBC in subject headings associated with this course as follows:

	UVIC	UBC	SFU
Hydrogeology	15	39	9
Hydrology	65	116	63
	--	---	--
Total	80	155	72

PEER GROUP COMPARISON

We developed a comparison of our holdings to a peer group for a 10 year period using the Amigos collection development system for selected Library of Congress call numbers associated with the subjects noted in the previous table, as follows:

	Peer Group	SFU	Gap +or-
GB 1003.2	14	5	9
GB 661-665	23	6	17
	--	--	--
Totals	37	11	26

Both comparative table indicate significant gaps. This conclusion is reinforced by looking at the operation of the Library Collection Profile.

PROFILE CHANGES

The Hydrology Division BNA #5148 is in the Library selection profile but is received as forms. The Library provided a print-out of the last five years of publishing in this field and the department selected from this list nine titles as relevant to this course. That is about two titles a year which we recommend budgeting \$200 per year to provide for future publishing in this field.

COST SUMMARY

Monographs: 4 titles from the reading list including the textbook \$400 non-recurring cost.

2 titles per year from the International Association for Hydrologic Science at a cost of \$100 per year.

Selection of two added titles per year from the forms profile at a cost of \$200 per year.

Serials: *Hydrological Processes* at \$350 per year recurring cost.

This list of materials required represents an agreement between the instructor, Dan Moore, and the Library made on 22 February, 1994.

THE COSTS ARE \$400 ONE TIME COST, \$300 PER YEAR RECURRING COST FOR MONOGRAPHS AND \$350 RECURRING COSTS FOR ONE SERIAL. TOTAL RECURRING COSTS OF \$650 PER YEAR ARE TO BE TRANSFERRED FROM THE DEPARTMENTS BASE BUDGET TO THE LIBRARY.

Please call me if you need further information or assistance.

Regards,

V
RS

MEMORANDUM

Date: January 17, 1995
To: Andrea Lebowitz
Associate Dean of Arts/Faculty of Arts Graduate Curriculum Committee
From: Dan Moore
Chair, Department of Geography Graduate Program
Subject: Deletion of Geography graduate courses

OFFICE OF THE DEAN

JAN 19 1995

FACULTY OF ARTS

Between about 1987 and 1993 there was a turnover of approximately eight faculty positions in the Geography Department. At the same time, there was concern developing about the number of Geography graduate courses "on the books" as opposed to the number actually offered with any regularity: many incoming graduate students complained about the gap between the rich choice of graduate courses described in the Calendar and what was actually available.

The Geography Graduate Committee therefore reviewed the graduate curriculum with the objectives of (a) creating new courses where necessary to accommodate research interests of new faculty, and (b) deleting courses which were either associated with retired faculty and/or not taught regularly. This review identified seven courses for deletion. These courses are listed below, along with the rationale for deletion.

GEOG 721-4 *Biogeography of wetlands* This course has been offered twice since 86-2 to a total of 5 students (in 90-1 and 91-1), and represents an inactive research interest of the faculty member offering the course.

GEOG 724-4 *Measurement and modelling of heat and mass transfer* This course was offered twice between 86-3 and present, to a total of 2 students (in 89-1 and 90-1).

GEOG 727-4 *Field and analytical techniques in geomorphology* This course was offered twice between 86-3 and present, to a total of 2 students (in 86-3 and 87-2).

GEOG 730-4 *Fossil landforms* This course was offered by C. Crampton, now retired, and was not offered between 86-3 and present.

GEOG 747-4 *Transportation* This course was offered by M.E. Eliot-Hurst, now retired, and was not offered between 86-3 and present.

GEOG 758-4 *Heritage resource management* This course was not offered between 86-3 and present.

GEOG 761-4 *Chronogeography* This course was offered by P. Wagner, now retired, and was not offered between 86-3 and present.

R. Dan Moore

R.D. Moore
Assistant Professor

fax: (604) 291 5841
phone: (604) 291 3320
e-mail: robert_moore@sfu.ca

From: Bruce Clayman <clayman>
Subject: library expenses
To: mcginn (Marian McGinn)
Date: Mon, 6 Mar 1995 11:45:46 -0800 (PST)
Cc: alderson (Evan Alderson)
X-Mailer: ELM [version 2.4 PL24]
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit
Content-Length: 512
X-UIDL: 794519177.000

Marian, please include this message with the material going to the
SGSC on Faculty of Arts Curriculum changes:
Bruce Clayman

>From Evan_Alderson@sfu.ca Mon Mar 6 11:16:14 1995
Date: Mon, 6 Mar 1995 11:16:09 -0800
To: Bruce_Clayman@sfu.ca
Subject: library expenses

I will cover the library costs for graduate curriculum changes in Geography
and Criminology ~~has~~ put forward to the Senate Graduate Studies Committee by
Andrea Lebowitz.

//.