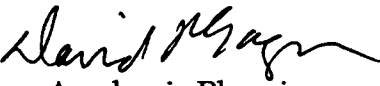


SIMON FRASER UNIVERSITY

OFFICE OF THE VICE-PRESIDENT, ACADEMIC

MEMORANDUM

To: Senate

From: D. Gagan, Chair 
Senate Committee on Academic Planning

Subject: Faculty of Science -
Establishment of the Department of Earth Sciences
(SCAP Reference: SCAP 99 - 19)

Date: April 19, 1999

Action undertaken by 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.99 -37, the establishment of the Department of Earth Sciences."

SIMON FRASER UNIVERSITY
MEMORANDUM

To: Alison Watt, Secretary
SCAP

From: M. Plischke,
Acting Dean, Faculty of
Science

Subject: Formation of a Department
of Earth Sciences

Date: April 7, 1999

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At its meeting of March 23, the Faculty of Science approved the proposal for the formation of a Department of Earth Sciences as outlined in the attached paper.

Please include this item on the agenda of the next meeting of SCAP for consideration and approval.



M. Plischke

c. M. Roberts

**DEPARTMENT OF EARTH SCIENCES
FACULTY OF SCIENCE
SIMON FRASER UNIVERSITY**

The Earth Sciences Program was initiated at SFU in 1994/5 to broaden the academic base of the Faculty of Science by adding to it a teaching and research capacity in the geological sciences and particularly in environmental geoscience. The Program was funded for its initial five years by the university's Academic Enhancement Fund; this funding will end as of March 31st, 1999 and the Program's budget will become part of the base budget of the Faculty of Science. The five-year implementation plan as spelled out in the original Academic Enhancement Fund proposal, and in Senate document (S88-22: which passed Senate on April 20, 1988), has been successfully completed.

Faculty and Staff

The Program began with two joint appointed faculty and has grown during the last five years to a complement of ten faculty with an eleventh (an FRBC Chair) the subject of a current search; it is served by a three person staff:

Dr. E.J. Hickin, (Sept. 1994)	Professor (Joint App. Geography)
Dr. M.C. Roberts (Sept. 1994)	Professor (Joint Appt. Geography) & Director
Ms. R. Dunlop (May 1995)	Laboratory Instructor
Dr. J. MacEachern, (Sept. 1995)	Assistant Professor
Dr. P. Mustard, (Sept. 1995)	Assistant Professor
Dr. D. Thorkelson, (Sept. 1995)	Assistant Professor
Ms. C. Alexander, (Sept. 1995)	Administrative Assistant
Dr. D. Allen, (Sept. 1996)	Assistant Professor
Dr. B. Ward, (Sept. 1997)	Assistant Professor
Mr. P. Johnstone, (Jan. 1998)	Dept Resource Specialist
Ms. C. Papaiani, (Aug. 1998)	Graduate Secretary & Receptionist
Dr. A. Calvert, (Sept. 1998)	Assistant Professor
Dr. D. Marshall, (Sept. 1998)	Assistant Professor
Dr. J. Clague, (Sept. 1998)	Shrum Chair
To be appointed (Jan. 2000)	FRBC Endowed Chair in Terrain Analysis and Forest Geoscience

Even though Earth Sciences is a young program it has been the recipient of two endowed chairs. Dr. J.J.Clague, FRSC, was appointed to the Shrum Chair of the Faculty of Science in September 1998. Funding has been approved for the Forest Renewal BC Chair in Terrain Analysis and Forest Geoscience which will be filled in the Fall Semester (99-3).

Academic Program

B.Sc. Major & Minor. One of the challenges in developing a program in environmental geoscience was to insure that the program had sufficient emphasis on traditional fields of geology to allow graduates to meet professional registration requirements (Association of Professional Engineers and Geoscientists of British Columbia: APEGBC). The practice of geoscience in Canada is now regulated by acts of the respective provincial legislatures. Graduates from the SFU Earth Sciences program have the academic prerequisites to meet professional registration requirements from other provinces thereby insuring their ability to practice geoscience throughout Canada. The Earth Sciences' Minor program has mainly attracted Physical Geography majors who need a suite of EASC courses to fulfill their APEGBC requirements; these students represent the main service teaching of the Program. Unlike the other departments in the Faculty of Science our courses are not required as part of other science degree programs. The dedication of the faculty to

undergraduate teaching is reflected in the consistently, positive reviews of the courses by our students.

As of March, 1999, there are 52 majors and 29 minors in the Earth Sciences Program. In 1998 an SFU Earth Sciences student was awarded one of the three Geological Association of Canada Student Internship Awards for the whole country. There is a very active Earth Science student society which is involved in activities ranging from running field trips to organizing social events.

M.Sc. The first graduate student was admitted into the Program in September, 1996 and by next Fall (99-3) we anticipate 14 students will be enrolled in the M.Sc. Program. One student has been admitted under Special Arrangements for a Ph.D.. All of these students have, or will have, some form of external funding from their supervisors to support their field and laboratory research. It is an objective of the Program to achieve Ph.D. granting authority in the next five years. This will hopefully coincide with the programs move into its allocated space in the Applied Sciences II building.

Co-op Program. Several of our majors have been involved in the Co-op program. There is a demand in the summer months for our students in the mining, forest and petroleum industries, and by geotechnical consulting firms. Such positions provide work experience for both Co-op and non-Co-op students. In addition, there are companies that prefer to hire students who will work both the summer and fall semesters - an ideal situation for many Co-op students. We have every expectation that the Co-op program will continue to grow.

Community Activities

One of the distinctive features of the geoscience disciplines is the frequent mounting of continuing education courses for practicing professionals, and researchers in academe and government. Faculty members in this Program have mounted short courses and workshops for such groups as the Geological Association of Canada, the American Association of Petroleum Geologists, Lithoprobe Annual Conference (the largest NSERC funded geoscience project) and the Canadian Geomorphology Research Group. Faculty members are also frequently asked to give talks on a variety of geoscience issues to their peers, teachers and the public. Active links are maintained with local schools whereby classes visit our main undergraduate teaching laboratory for hands-on demonstrations.

Conclusion

The Earth Sciences Program has been successfully launched: it has a strong and growing group of majors and minors; the graduate program also is growing in numbers, and the faculty have established research programs with funding from NSERC, government funding agencies and industry.

The program is now operating as a department in all but name.