

S.87-69

SIMON FRASER UNIVERSITY

MEMORANDUM

TO: Senate **FROM:** J.W.G. Ivany,
Chair, SCAP

SUBJECT: Graduate Curriculum **DATE:** Nov.19, 1987
Changes - MRM Program
Reference: SCAP 87-37, 87-38

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

MOTION: "That Senate approve and recommend approval to the Board of Governors, as set forth in S.87-69

- 1) change in the description of the nature of the MRM Program
- 2) change in course description for MRM 621-5, MRM 650-5, and MRM 641-5
- 3) deletion of prerequisites for MRM 648-5"

S I M O N F R A S E R U N I V E R S I T Y

MEMORANDUM

NATURAL RESOURCES MANAGEMENT PROGRAM

TO: Marg Savage
Faculty of Applied Sciences
Grad. Studies Comm.

FROM: Randall M. Peterman
Professor
MRM Program

SUBJECT:

DATE: 26 October 1987

Please find enclosed a revised description of our program to go into the SFU calendar.

Rationale

The interdisciplinary nature of our master's program is relatively unique in Canada but it is not widely understood. We wish to clarify this with the New Description below. We have learned that many potential applicants have been confused; some thought that our program was strongly science-based, others thought that it mostly focused on social sciences. This confusion even extended to NSERC in Ottawa; we know of two students in Ontario and Quebec who were incorrectly told by NSERC staff that they could not hold NSERC postgraduate scholarships in our program because we were supposedly not science-based. We have subsequently clarified this misconception with NSERC, but obviously considerable confusion may also exist for students reading the SFU calendar.

The New Description below now more clearly describes the nature of our program than the previous calendar entry. Thank you for considering this change.



Randall M. Peterman

RMP/jr

Description of the nature of the program.

OLD DESCRIPTION

This is a professional program designed for individuals with experience in private organizations or public agencies dealing with resources, and for recent graduates in various disciplines related to natural resources management. From time to time courses are scheduled in the evening to permit students to complete the program on a part-time basis.

The program is intended for individuals with undergraduate training and experience in fields such as biology, economics, engineering, forestry, geography, geology, or planning. Students take an integrated sequence of courses from complementary fields. The aim is to develop increased familiarity and competence in understanding selected aspects of the resources base, strategies and techniques of natural resource analysis and management, and the biological, social, and economic implications of resource decisions.

NEW DESCRIPTION

THE PROGRAM

The Natural Resources Management Program is a graduate program in the Faculty of Applied Sciences that leads to a professional masters-level degree in resource management (MRM degree). Under certain circumstances, doctoral programs may also be set up under Special Arrangements. The MRM Program is designed for individuals with experience in private organizations or public agencies dealing with natural resources, or for recent graduates in various disciplines related to natural resources. From time to time, courses are scheduled in the evening or week-long blocks to permit students to complete the program on a part-time basis.

Effective management of natural resources requires interdisciplinary skills as well as expertise in appropriate specialties. Problems in the management of resources such as forests, fisheries, wildlife, minerals, water, and agricultural lands are intensifying as competing demands increase. Expertise in traditional resource disciplines is currently needed and will continue to be in demand. But such experts are more effective managers if their experience and background could be supplemented by a wider exposure to several disciplines involved in resource problems.

The purpose of the MRM Program is to meet this need for deeper and broader graduate training in natural resources. It is intended for individuals with undergraduate training and experience in fields such as biology, engineering, forestry, and geology as well as business administration, economics, geography, planning, and other social sciences. Students take an integrated sequence of courses in complementary fields, take further courses in their area of specialization, and do a research project on a topic involving more than one traditional discipline. The aim is to give students increased

familiarity and competence in understanding the natural dynamics of resources, strategies and techniques of natural resource management, and the biological, physical, social, economic, and institutional implications of resource decisions. Students also become familiar with various quantitative methods of analysis and aids to decision making. This integrated, interdisciplinary emphasis has been part of the MRM Program since its inception in 1979.

In the field of natural resources, in particular, it is important that an academic program stress problem-solving and critical thinking rather than focus primarily on subject matter such as fisheries, economics or wildlife biology. To this end, the methods of integrating and synthesizing specialist approaches are stressed in the program. It does not seek to make economists of social scientists, or biologists of engineers. But it makes for example, economists aware of legitimate biological constraints to ideal economic solutions, and permits economists and biologists to converse together and with individuals from other disciplines.

Research by faculty and students is intended to evaluate the effectiveness of existing management policies and to develop new strategies where appropriate. These strategies often emerge from research into the biological dynamics of natural resources, or the institutional, social, economic, or public policy aspects of their management. Researchers apply a range of methodologies, from benefit-cost analysis and simulation modelling, to legal and institutional analyses, and social surveys. Considerable research is done in direct collaboration with resource management agencies to ensure implementation of research results.

Finally, in spite of its interdisciplinary nature, students in the MRM Program can hold major scholarships from a variety of disciplinary agencies including NSERC (Natural Sciences and Engineering Research Council), SSHRC (Social Sciences and Humanities Research Council), and CMHC (Canada Mortgage and Housing Corporation).

SIMON FRASER UNIVERSITY
FACULTY OF APPLIED SCIENCES
NATURAL RESOURCES MANAGEMENT PROGRAM

MEMORANDUM

TO: Dr. Margaret Savage, Chair
Faculty of Applied Sciences
Graduate Studies Committee

FROM: Dr. Randall M. Peterman
Professor
MRM Program

SUBJECT: Course Revision
MRM 621-5

DATE: 13 October, 1987

Would you kindly consider the following revised course description for MRM 621-5 at the next meeting of the FAS Graduate Studies Committee meeting. Thank you.

OLD DESCRIPTION

MRM 621-5 Economics of Natural Resources
Application of economic theory to natural resources management problems, with a view to assessing existing and alternative policies. Topics include benefit-cost analysis, economics of preservation, pricing of natural resource services, alternative pollution-control strategies, and fisheries management.

NEW DESCRIPTION

Application of economic theory to natural resources management problems with a view to assessing existing and alternative policies. Includes theoretical analysis of concepts such as resource pricing, market failure, taxation, etc., and management strategies for specific resources such as forestry, fisheries, and environment.



Randall M. Peterman

RATIONALE: Need to clarify the bipolarity in the economics course between, on the one hand, theoretical concepts and, on the other, their application to the analysis of specific resource sectors.

SIMON FRASER UNIVERSITY
FACULTY OF APPLIED SCIENCES
NATURAL RESOURCES MANAGEMENT PROGRAM

MEMORANDUM

TO: Dr. Margaret Savage, Chair
Faculty of Applied Sciences
Graduate Studies Committee

FROM: Dr. Randall M. Peterman
Professor
MRM Program

SUBJECT: Course Revision
MRM 650-5

DATE: 13 October, 1987

Would you kindly consider the following revised course description for MRM 650-5 at the next meeting of the FAS Graduate Studies Committee meeting. Thank you.

OLD DESCRIPTION

MRM 650-5 Energy Use and Policies
An historical perspective of energy use and future prospects for fossil fuels, hydroelectricity, geothermal, nuclear, solar, wind, and other sources; factors affecting energy demand.
(Offered every second year.)

NEW DESCRIPTION

Integration of energy supply and demand analysis in order to formulate comprehensive energy management policies.



Randall M. Peterman

RATIONALE: Need to update course description in order to account for the rapid evolution in recent years of the approach to energy resource management.

SIMON FRASER UNIVERSITY
FACULTY OF APPLIED SCIENCES
NATURAL RESOURCES MANAGEMENT PROGRAM

MEMORANDUM

TO: Dr. M. Savage, Chair
FAS Graduate Studies Committee

FROM: Randall M. Peterman
Professor
MRM Program

SUBJECT: MRM Course Revision

DATE: 24 September, 1987

Would you kindly consider the following course revision at the next meeting of the Faculty of Applied Sciences Graduate Studies Committee.


MRM 641-5 Law and Resources

OLD DESCRIPTION

Advance study of legal interventions related to resource planning and environmental control. Topics considered include planning law, law of pollution control, legal aspects of land management, property rights, resource taxation, and problem of managing common pool resources.

REVISED DESCRIPTION

A study of legal interventions related to resource planning and environmental control. The course looks at several aspects of environmental and resource law including administrative and constitutional law, fisheries and forestry regulation, and native rights.



Randall M. Peterman

RMP/jr

RATIONALE:

The course is now being taught by a permanent faculty member instead of sessionals and as a result the topics covered in the course are different than were originally proposed when this course was originally set up 8 years ago.

SIMON FRASER UNIVERSITY
FACULTY OF APPLIED SCIENCES
NATURAL RESOURCES MANAGEMENT PROGRAM

MEMORANDUM

TO: Dr. M. Savage, Chair
FAS Graduate Studies Committee

FROM: Randall M. Peterman
Professor
MRM Program

SUBJECT: MRM Course Revision

DATE: 25 September, 1987

Would you kindly consider the following course revision at the next meeting of the Faculty of Applied Sciences Graduate Studies Committee.

MRM 648-5 The Tourism System

OLD PREREQUISITES

Prerequisites: MRM 601, 611, 621, 642, or permission of instructor.

REVISED PREREQUISITES

Prerequisites: none.

Randall

Randall M. Peterman

RMP/jr

RATIONALE: Prerequisite courses were originally listed in error. In addition, experience in teaching this course over the last year demonstrated that prerequisites are not necessary.