

MEMORANDUM

Members of Senate

From Office of the Dean of Graduate Studies

Subject Proposed Graduate Calendar Changes -
Master of Natural Resources Management Program

Date November 20, 1979

Curriculum Changes, including New
Courses.

MOTION: That Senate approve the attached proposed
Graduate Calendar changes for the Master of
Natural Resources Management Program.

These changes were approved by the Senate Graduate Studies
Committee on November 19, 1979.



Bryan P. Beirne
Dean of Graduate Studies.

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attach.

SIMON FRASER UNIVERSITY

MEMORANDUM

To	M. McGinn, Assistant Registrar, Graduate Studies	From	T. W. Calvert, Dean, Faculty of Interdisciplinary Studies
Subject	MRM Program Changes	Date	October 12, 1979

At its meeting on October 11, 1979, the Faculty of Interdisciplinary Studies Graduate Studies Committee approved the following items from the Master of Natural Resources Management Program:

- (1) Change in degree requirements for MRM (see attached).
- (2) The new courses:
MRM 647 Rural Planning
MRM 650 Energy Use and Policies
MRM 660 Special Topics in Resource Management.



T. W. Calvert

TWC:lch

Attachment

cc J. C. Day

These changes were approved by the Executive Committee, Senate Graduate Studies Committee at its meeting on November 5, 1979.

SIMON FRASER UNIVERSITY

MEMORANDUM

To.....
.....
Subject.....

From..... Dr. J.C. Day, Director.....
..... MRM Program.....
Date..... November 20, 1979.....

Rationale for Proposed MRM Program Changes

The proposed course changes are intended to enrich the offerings available to MRM students. In the revised program 10 of the original 14 MRM courses are retained as the core; the remaining 4 are made available as options. Eight additional courses are proposed for our Program including 3 new MRM offerings (MRM 647 -- Rural Planning, MRM 650 -- Energy Uses and Policy, MRM 660 -- Special Topics in Resources Management). The remaining 5 are existing specialized courses from Business Administration, Economics, Biosciences, and Forestry.

The final suggested change concerns prerequisite courses. A parametric and nonparametric Statistics course is essential for all MRM students.

Dr. J.C. Day

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DEGREE REQUIREMENTS

The basic program prescribes completion of 29 hours of required graduate courses. The student also undertakes an additional four elective courses (at least 12 hours) for a total of at least 41 credit hours.

Six hours of this total can be for graduate course transfer credit either in required or elective courses. Up to a further six hours of the required courses can be replaced by elective courses if the student has completed the content of one or more of the required courses to a level satisfactory to the Director of the Program. Under these provisions, at least 35 Program credit hours must be taken at this institution.

Prerequisite Courses

All students must complete or have completed three undergraduate courses or their equivalents:

Geomorphology
Microeconomic Principles
Parametric and Nonparametric Statistics

Required Courses

MRM 601-2	Natural Resources Management Seminar I
MRM 602-2	Natural Resources Management Seminar II
MRM 611-3	Resources Biology I
MRM 612-3	Resources Biology II
MRM 621-3	Economics of Natural Resources
MRM 631-3	Hydrology and Geomorphology of Drainage Basins
MRM 641-3	Law and Resources
MRM 642-3	Regional Resource Planning
MRM 646-3	Environmental and Social Impact Assessment
MRM 699-4	Research Project

Elective Courses

MRM 632-3	Terrain Evaluation
MRM 643-3	Mathematical Models in Resource Planning
MRM 644-3	Public Policy Analysis
MRM 645-3	Resource Development and Communities
MRM 647-3	Rural Planning
MRM 650-3	Energy Uses and Policy
MRM 660-3	Special Topics in Resources Management
MBA 603-5*	Organization Management
MBA 632-5*	Operations Research
MBA 691-5*	Business and Society
ECON 863-4	Fisheries Economics
FORESTRY 543-3**	Remote Sensing (UBC)

* With permission of the Director of the MBA Program.

**May be taken at the University of British Columbia with permission of the MRM Director.

(Other graduate courses may be substituted with the approval of the Director.)

Post Graduate Course Proposal Form

1. COURSE INFORMATION:

Department: Natural Resources Management

Course Number: MRM 647

Title: Rural Planning

Description: The nature and typical problems of rural areas, their people, their governmental processes, and powers.

Credit Hours: 3

Vector: 3-0-0

Pr. requisite(s) if any: MRM 642

2. ENROLLMENT AND SCHEDULING:

Estimated Enrollment: 15 When will the course first be offered: 1981-1

How often will the course be offered: Once a year.

3. JUSTIFICATION:

Many professional resources managers are required to be familiar with the institutional decision-making structure of Regional Districts. This course reviews approaches and problems the contemporary approach to rural planning in British Columbia.

4. RESOURCES:

Which Faculty member will normally teach the course: J.W. Wilson

What are the budgetary implications of mounting the course: The existing budget for sessionals is sufficient.

Are 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: Departmental Graduate Studies Committee: *John Goodwill Day* Date: 12 Oct 79

Faculty Graduate Studies Committee: *J.W. Wilson* Date: 15 Oct 79

Faculty: _____ Date: _____

Senate Graduate Studies Committee: *Raymond Blewett* Date: 27 Oct 79

Senate: _____ Date: _____

MRM 647-3
RURAL PLANNING

This is a non-technical course dealing with the problems of and approaches to rural land use planning largely from the point of view of a Regional District in British Columbia. The course is divided into three main phases:

1. Introductory lectures covering the nature and typical problems of rural areas, their people, their governmental processes and powers and the approaches taken to their problems.
2. Lectures by guest experts on (a) resource developments, including forestry, mining and agriculture (b) governmental operations applying to rural areas, notably highways, water administration, the ELUC Secretariat and regional district planning.
3. Case studies from B.C. and elsewhere illustrating typical rural planning operations.

Assignments

There will be regular readings throughout the course. The main products required of students will be:

1. Resumes of guest lectures.
2. A course review covering phases 1 and 2.
3. Reports on two of the case studies.

FACULTY COMPETENCE

Professor Jim Wilson is an expert in the rural planning field. He has taught related courses in the Geography Department for many years.

Selected Bibliography

British Columbia. Municipal Act.

British Columbia. Department of Economic Development. 1976.
Kootenay Report. Victoria, B.C.: Government Printing Office.

_____. 1976. Mid Coast Report. Victoria, B.C.: Government
Printing Office.

British Columbia. Department of Municipal Affairs. 1978. The
Role of Ecological Information in Settlement Planning. Victoria,
B.C.: Government Printing Office.

_____. 1978. Technical Guide. Victoria, B.C.: Government
Printing Office.

British Columbia. Environment and Land Use Committee. 1976.
Coal Guidelines. Victoria, B.C.: Government Printing Office.

_____. 1977. Statutory Requirements for Linear Developments.
Victoria, B.C.: Government Printing Office.

_____. 1979. Functions, Organization, and Planning Approach.
Victoria, B.C.: Government Printing Office.

British Columbia. Ministry of the Environment. 1979. Proposed
Wildlife Management Plan. Victoria, B.C.: Government Printing
Office.

British Columbia. Annual. Annual Report. Victoria, B.C.: Govern-
ment Printing Office.

Canadian Habitat Secretariat. 1976. Where Are We Headed.

Canadian Institute of Planners. 1977. "Cottage Country", Forum.

Greater Vancouver Regional District. 1976. Farm Viability Study.
Vancouver, B.C.: GVRD.

Lassey. 1977. Planning in Rural Environments. New York, N.Y.:
McGraw-Hill.

Manitoba. 1973. Guidelines for the 70's, Vol. 1. Winnipeg, Man.:
Government Printing Office.

Ontario. Regional Planning Branch. 1976. Exurban Development in
Southwestern Ontario. Toronto, Ont.: Government Printing Office.

Rucki. 1977. "Industrial Structure Population Structure, and
Regional Development". Unpublished M.A. Thesis, Simon Fraser
University.

Shalinsky, W. 1977. "Small Groups in the Planning Process",
Contact.

Wilson, J.W. 1973. People in the Way: The Human Aspect of the
Columbia River Project. Toronto, Ont.: University of Toronto
Press.

Post Graduate Course Proposal Form

1. COURSE INFORMATION:

Department: Natural Resources Management

Course Number: MRM 650

Title: Energy Use and Policies

Description: An historical perspective of energy use and future prospects for fossil fuels, hydroelectricity, geothermal, nuclear, solar, wind, and other sources; factors affecting energy demand.

Credit Hours: 3

Vector: 3-0-0

Prerequisite(s) if any: Permission of instructor for non-MRM students.

2. ENROLLMENT AND SCHEDULING:

Estimated Enrollment: 15 - 20 When will the course first be offered: Fall, 1980

How often will the course be offered: Once a year.

3. JUSTIFICATION:

Energy management policies are fundamental to British Columbia, Canada, and world prosperity. Such a course should be available to professional resources managers and other graduate students.

4. RESOURCES:

Which Faculty member will normally teach the course: Sessional Instructors

What are the budgetary implications of mounting the course: The existing budget for sessionals is sufficient.

Are there sufficient Library resources (append details): Adequate

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

Approved: Departmental Graduate Studies Committee: John Chadwick Day Date: Oct. 10, 1979

Faculty Graduate Studies Committee: J.W. Bolner Date: Oct. 11, 1979

Faculty: _____ Date: _____

Senate Graduate Studies Committee: Robert Blew Date: 27 Nov 79

Senate: _____ Date: _____

The course will be taught by qualified professionals from government agencies, industry, business, and the SFU faculty. It will be coordinated by J.C. Day, MRM Director.

MRM 650-3
ENERGY USE AND POLICIES

1. Energy sources and the energy cycle.
2. An historical perspective of changing energy demands:
past, present, and future.
3. Fossil Fuels:
 - present and future technology
 - supply estimates
 - economic and environmental concerns
4. Hydroelectricity and Geothermal energy:
 - present and future technology
 - supply estimates
 - economic and environmental concerns
5. Nuclear energy:
 - present and future technology
 - supply estimates
 - economic and environmental concerns
6. New energy alternatives:
 - solar
 - wind
 - technological fixes: improved efficiency and waste reduction
7. Policy directions and decision makers:
 - how are the decisions made
 - expanding the range of choice

LIBRARY HOLDINGS: A selected bibliography of SFU holdings of relevant energy literature follows. There will be a need to acquire major publications as they become available but the annual cost would be modest, \$300 - \$400 annually.

- Abrahamoon, B.J., Ed. 1976. The Changing Economics of World Energy . Westview Press Inc., Boulder, Colorado.
- Barker, M.L., Ed. 1978. Energy Issues in Canada. Department of Geography, Discussion Paper Series. Simon Fraser University, Burnaby, B.C.
- Cook, P.L. and A.J. Surrey. 1977. Energy Policy. London, U.K.: Martin Robertson.
- Economic Commission for Europe. 1976. Increased Energy Economy and Efficiency in the E.C.E. Region . United Nations, New York.
- Efford, I.E. and B.M. Smith, Eds. 1972. Energy and the Environment . Institute of Animal Resource Ecology, University of B.C., Vancouver, B.C.
- Evans, Douglas. 1978. Western Energy Policy. New York, N.Y.: Macmillan.
- Evans, Douglas. 1976. The Politics of Energy. New York, N.Y.: Macmillan.
- Ford Foundation, The. 1974. Exploring Energy Choices , A Preliminary Report of the Ford Foundation's Energy Policy Project. The Ford Foundation, 1776 Massachussets Avenue, N.W., Washington, D.C. 20036.
- Fraser Institute, The. 1977. Oil in the Seventies . The Fraser Institute, 626 Bute Street, Vancouver, B.C.
- Hubbert, M. King. 1962. Energy Resources . A report to the Committee on Natural Resources of the National Academy of Sciences - National Research Council. Publication 1000-D. National Academy of Sciences - National Research Council, Washington, D.C.
- Inglis, K.A.D., Ed. 1974. Energy: From Surplus to Scarcity . Applied Science Publishers Ltd., Ripple Road, Barking, Essex, England.
- Lovins, Amory. 1975. Non-Nuclear Futures: The Case for an Ethical Energy Strategy. San Francisco, Cal.: Friends of the Earth International.
- Lovins, Amory. 1975. World Energy Strategies. San Francisco, Cal.: Friends of the Earth International.
- Maddala, G.S., W.S. Chern and G.S. Gill, Eds. 1978. Econometric Studies in Energy Demand and Supply . Praeger Publishers. A division of Rinehart and Winston. C.B.S. Inc. New York, London.

- O.E.C.D. 1974. Energy and the Environment. Organization for Economic Cooperation and Development, 2, Rue Andre-Pascal, 75775 Paris Cedex, 16, France.
- O.E.C.D. 1975. Energy Prospects to 1985. Organization for Economic Cooperation and Development, 2, Rue Andre-Pascal, 75775 Paris Cedex, 16, France.
- Penner, S.S., and L. Icerman. 1974. Energy. Vol. 1 and 2. Reading, Mass.: Addison-Wesley.
- Royal Society of Canada. 1973. Symposium on Energy Resources. Royal Society of Canada, 395 Wellington Street, Ottawa, Ont. K1A 0I4
- Searl, Milton. 1973. Energy Modelling. Working Papers for a Seminar on Energy Modelling. Washington, D.C.: Resources for the Future.
- Thompson, R.G., J.A. Calloway, and L.A. Nawalanic, Eds. 1978. The Cost of Energy and a Clean Environment. Houston, Texas: Gulf Publishing, Book Division.
- Thomas, A.G., Ed. 1977. Energy Analysis. IPC Science and Technology Press and Westview Press, U.K.

Periodicals

- Energy Research and Development Administration and Federal Energy Administration. 1975 to 1979. Energy Abstracts for Policy Analysis, Vol. 1 to 5, No. 4. Washington, D.C.: Superintendent of Documents U.S. Government Printing Office.

Date: 7 Nov. 79

SFU LIBRARY COLLECTION EVALUATION

(To be completed only for new course or program proposals.)

1. Course No. and Name or Program: MRM 650 Energy Use and Policies
Date to be offered: Fall 1980

2. Resources currently in collection:

Reading lists. No. and % of titles available: 100%

Related materials in general collection:

Monographs: (General collections already
Serials Subscriptions: (contain enough material relating
Backfiles: (to the course to service the type
Other: (of survey course that Professor Day
(has in mind.)

3. Recommended additions to collection:

(Indicate approx. no. of titles, vols.,
date, as appropriate)

Monographs: (No recommended additions,
New serials subscriptions: (although future acqui-
Serials backfiles: (sitions will be shaped by
Other (specify): (the requirements of
(MRM 650 and MRM 660

ESTIMATED COST

total

Nil

4. Comments:

* Professor Day's course is a survey of historic practices and
an attempt to project future problems. No deep research is
envisioned at this stage. Our holdings appear adequate as far
as what has already been acquired is covered.

Jack Lane
For Library

NA
For Faculty Department

** consulted by phone.*

How Graduate Course Proposal Form

Department: Master of Natural Resources Management

Course Number: MRM 660

Title: Special Topics in Natural Resources Management

Description: Special topics in areas not currently offered within the offerings of the MRM Program

Credits: 3 Vector: 3-0-0

ENROLLMENT SCHEDULE:

Initial Enrollment: 15-20 When will the course first be offered: ?

How often will the course be offered: ?

JUSTIFICATION:

Such a course would permit the evaluation of potential new topics into the MRM curriculum on an experimental basis to determine if they should be used permanently; modified, or discontinued.

RESOURCES:

Which Faculty member will normally teach the course: _____

What are the budgetary implications of mounting the course: Such a course would initially be taught by sessional instructors.

Are there sufficient Library resources (append details): These topics will not require any major library purchases.

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

Approved by: Departmental Graduate Studies Committee

John Bradwell Day
J. W. Bolvet

Date: 12 Oct 79

Faculty Graduate Studies Committee:

Date: 15 Oct 79

Faculty:

Date:

Senate Graduate Studies Committee:

Pyper Blum

Date: 27 Nov 79

Senate:

Date: