



Office of Graduate Studies and Postdoctoral Fellows

Simon Fraser University
Maggie Benston Centre 1100
8888 University Drive
Burnaby, BC V5A 1S6

TEL 778.782.3042
FAX 778.782.3080

gradstudies@sfu.ca
www.sfu.ca/grad

MEMORANDUM

ATTENTION Senate
FROM Wade Parkhouse, Chair of Senate
Graduate Studies Committee (SGSC)
RE: Faculty of Environment

DATE March 3 2015
No. GS2015.11

A handwritten signature in cursive script, appearing to read 'Wade Parkhouse', is written over the 'No.' field of the memorandum.

For information:

Acting under delegated authority at its meeting of March 2, 2015, SGSC approved the following program changes effective Fall 2015:

School of Resource and Environmental Management

Program change: Master of Resource Management

Program change: Master of Resource Management (Planning)

Program change: PhD Resource and Environmental Management



FACULTY OF ENVIRONMENT

TASC 2 Building, Room 8900
8888 University Drive, Burnaby, BC
Canada V5A 1S6

TEL 778.782.8787
FAX 778.782.8788

fenv-info@sfu.ca
www.fenv.sfu.ca/

MEMORANDUM

ATTENTION Wade Parkhouse, Dean of Graduate Studies
FROM Sean Markey, FEnv Associate Dean
RE: REM Curriculum Changes: MRM, MRM (Planning), REM PhD

DATE February 10, 2015
PAGES 1/1

Dear Wade,

Attached, please find the cover letter and corresponding documents concerning proposed changes to the MRM, MRM (Planning), and REM PhD programs, along with the "Calendar Entry Change" forms for each program in the School of Resource and Environmental Management.

The FEnv GPC passed these changes unanimously.

Please add this item to the next SGSC agenda for consideration.

Thank you.

A handwritten signature in black ink, appearing to be "AM", is written over the typed name.



SCHOOL OF RESOURCE AND ENVIRONMENTAL MANAGEMENT (REM)
Faculty of Environment

TASC 1
8888 University Drive,
Burnaby, BC
Canada V5A 1S6

TEL 778.782.4659
FAX 778.782.4968

mbr@sfu.ca

MEMORANDUM

ATTENTION	Sean Markey, Associate Dean, Faculty of Environment	DATE	January 30, 2015
FROM	Murray Rutherford, Chair of Graduate Studies, REM	PAGES	1/1
RE:	Program changes for MRM, MRM (Planning), and REM PhD		

On behalf of the School of Resource and Environmental Management, I request approval from the FENV Graduate Program Committee for changes to the MRM, MRM (Planning) and REM PhD degree programs, as described below and in the attached "calendar change" forms. These changes have been approved by the REM Graduate Program Committee and REM faculty. We would like the changes to come into effect for the fall 2015 semester.

MRM degree

- Reduce the number of elective courses required for the MRM degree from 6 graduate courses (minimum 26 units) to 4 graduate courses (minimum 18 units). The number of non-elective (required) courses for the degree will remain at 8 courses (43 units), including an introductory field course (3 units) and a Master's project (10 units).
- Correct clerical errors and clarify wording in the calendar description of the program.

MRM (Planning) degree

- Reduce the number of elective courses required for the MRM (Planning) degree from 3 graduate courses (minimum 11 units) to 1 graduate course (minimum 3 units). The number of non-elective (required) courses for the degree will remain at 11 (58 units), including an introductory field course (3 units) and a Master's project (10 units).
- Correct clerical errors and revise and clarify wording to correspond with wording for the MRM degree:
 - Revise the description of the benefits of an accredited planning degree to reflect changes in the membership requirements of the Planning Institute of BC and the Canadian Institute of Planners;
 - Revise the description of the program requirements to match the format and wording of the description of the MRM degree, and correct errors and

omissions that have developed in the calendar description of the MRM (planning) degree:

- Include the prerequisite course in statistics (or equivalent knowledge)
- Include the possibility of a waiver of one required course
- Add REM 698 Field Resource Management Workshop to the list of required courses
- Replace the long (and incomplete) specific list of possible electives with a more general description of the range of permissible electives (to match the MRM description)

REM PhD degree

- Clarify the descriptions of the program requirements and required courses.
- Add the option of substituting an equivalent or more advanced course for one of the required core courses, with the approval of the supervisory committee and the REM graduate studies committee.
- Revise the description of the required minimum grade point average to make it clear that the minimum is an overall A- average across all required core courses rather than an A- average in each course.

The changes to the number of electives required for the MRM and MRM (Planning) degrees will reduce the heavy course load for each of these degrees from 14 courses to 12 courses (including the introductory field course and the Master's project). We expect that this reduction will help to address concerns about completion times in our Master's programs. The rationales for the other minor changes are explained in the attached documents.

Thank you,



Murray Rutherford

Calendar Entry Change for Master of Resource Management (MRM), School of Resource and Environmental Management, Faculty of Environment

January 28, 2015

Summary of change:

- Reduce the number of elective courses required for the MRM degree from 6 graduate courses (minimum 26 units) to 4 graduate courses (minimum 18 units). The number of non-elective (required) courses for the degree will remain at 8 courses (43 units), including an introductory field course (3 units) and a Master's project (10 units).
- Correct clerical errors and clarify wording in the description of the program:
 - The introductory description of the Program Requirements should mention the introductory field course as one of the requirements for the degree.

Rationale for change:

- Reduce the heavy course load in the program from 14 courses (8 required and 6 elective) to 12 courses (8 required and 4 elective). The required courses include a short introductory field course and a major project.
- Clarify the wording in the calendar and correct minor errors and inconsistencies that have developed over time in the description of the program.

Will this change impact current students? If yes, what is the plan for current students?

- Current students will either continue under the curriculum requirements in place when they entered the program or they may elect to complete the program under the new requirements with fewer electives. New students will enter under the new requirements.

FROM	TO
Program Requirements Students complete seven required courses (including a research project [REM 699]), and six graduate elective courses. A minimum of 69 units is required, consisting of 43 required units and 26 elective units. In exceptional cases, if a student provides evidence of advanced education that is equivalent to one of the required courses, a waiver may be granted for that course, thereby reducing the required courses to six.	Program Requirements Students complete <u>an introductory field course [REM 698], six additional</u> required courses, <u>and a major written</u> research project [REM 699]. <u>The research project must be presented and defended at an oral defense. In addition, students are required to complete four</u> graduate elective courses. A minimum of <u>61</u> units is required, consisting of 43 required units and <u>18</u> elective units. In exceptional cases, if a student provides evidence of advanced education that is equivalent to one of the required courses, a waiver may be granted for that course, thereby reducing the <u>number of</u> required courses <u>by one</u>.

FROM	TO
Elective Courses To fulfil the six elective graduate courses requirement (26 units), students choose those that support and complement their particular research interests. Students may, in consultation with their senior supervisor, select REM courses and/or courses from other departments.	Elective Courses <u>Students choose four graduate courses (18 units minimum) as electives</u> to support and complement their particular research interests. Students may, in consultation with their senior supervisor, select REM courses and/or other graduate courses.

Calendar Entry Change for Master of Resource Management (Planning), School of Resource and Environmental Management, Faculty of Environment

January 28, 2015

Summary of changes:

- Reduce the number of elective courses required for the MRM (Planning) degree from 3 graduate courses (minimum 11 units) to 1 graduate course (minimum 3 units). The number of non-elective (required) courses for the degree will remain at 11 (58 units), including an introductory field course (3 units) and a Master's project (10 units).
- Correct clerical errors and revise and clarify wording to correspond with wording for the MRM degree:
 - Revise the description of the benefits of an accredited planning degree to reflect changes in the membership requirements of the Planning Institute of BC and the Canadian Institute of Planners;
 - Revise the description of the program requirements to match the format and wording of the description of the MRM degree, and correct errors and omissions that have developed in the calendar description of the MRM (Planning) degree:
 - Include the prerequisite course in statistics (or equivalent knowledge)
 - Include the possibility of a waiver of one required course
 - Add REM 698 Field Resource Management Workshop to the list of required courses
 - Replace the long (and incomplete) specific list of possible electives with a more general description of the range of permissible electives (to match the MRM description)

Rationale for change:

- Reduce the heavy course load in the program from 14 courses (11 required and 3 elective) to 12 courses (11 required and 1 elective). The required courses include a short introductory field course and a major project.
- Clarify the wording in the calendar, correct minor errors and inconsistencies that have developed over time in the description of the program, and revise the wording of the MRM (Planning) requirements to match the format and wording for the MRM program.

Will this change impact current students? If yes, what is the plan for current students?

- Current students will either continue under the curriculum requirements in place when they entered the program or they may elect to complete the program under the new requirements with fewer electives. New students will enter under the new requirements.

FROM	TO
Resource Management (Planning) Masters MASTER OF RESOURCE MANAGEMENT Students who successfully complete this program will be awarded the degree of master of resource management (planning). In Canada, this planning stream program is distinctive because of its focus on the policy, economic and science aspects of natural resource and environmental planning. The program is accredited by the Canadian Institute of Planners (CIP) and the Planning Institute of BC (PIBC). A MRM (Planning) graduate is eligible for membership as a certified professional planner and may enjoy improved employment prospects, conference and workshop participation, and access to professional development programs.	Resource Management (Planning) Masters MASTER OF RESOURCE MANAGEMENT <u>(PLANNING)</u> Students who successfully complete this program will be awarded the degree of master of resource management (planning). In Canada, this planning stream program is distinctive because of its focus on the policy, economic and <u>environmental</u> science aspects of natural resource and environmental planning. The program is accredited by the Canadian Institute of Planners and the Planning Institute of <u>British Columbia</u>. An MRM (Planning) graduate is eligible for <u>candidate</u> membership <u>to become</u> a certified professional planner and may enjoy improved employment prospects, conference and workshop participation, and access to professional development programs.

FROM	TO
Program Requirements Required Courses Students complete a total of 55 units, including all of REM 601 - Social Science of Natural Resources Management (5) REM 602 - Natural Resource Management II: Advanced Seminar (5) REM 611 - Population and Community Ecology (5) REM 621 - Ecological Economics (5) REM 631 - Earth Systems and Global Change in Environmental Management (5) REM 641 - Law and Resources (5) REM 642 - Sustainable Community Planning and Regional Development (5) REM 643 - Environmental Conflict and Dispute Resolution (5) REM 699 - Research Project (10) REM 801 - Principles of Research Methods (5)	Program Requirements <u>Students complete an introductory field course [REM 698], nine additional required courses, and a major written research project [REM 699]. The research project must be presented and defended at an oral defense. In addition, students complete one graduate elective course. A minimum of 61 units is required, consisting of 58 required units and three elective units. In exceptional cases, if a student provides evidence of advanced education that is equivalent to one of the required courses, a waiver may be granted for that course, thereby reducing the number of required courses by one.</u> <u>Prerequisite Courses</u> <u>Students must be familiar with the material covered in an undergraduate course in parametric and nonparametric statistics.</u> <u>Required Courses</u> <u>Students</u> complete a total of <u>58</u> units, including all of REM 601 - Social Science of Natural Resources Management (5) REM 602 - Natural Resource Management II: Advanced Seminar (5) REM 611 - Population and Community Ecology (5) REM 621 - Ecological Economics (5) REM 631 - Earth Systems and Global Change in Environmental Management (5) REM 641 - Law and Resources (5) REM 642 - Sustainable Community Planning and Regional Development (5)

	REM 643 - Environmental Conflict and Dispute Resolution (5) <u>REM 698 - Field Resource Management Workshop (3)</u> REM 699 - Research Project (10) REM 801 - Principles of Research Methods (5)
--	--

FROM	TO
Elective Courses Students complete a total of 11 units, including three of REM 610—Applied Environmental Toxicology and Environmental Management of Contaminants (5) REM 612—Simulation Modelling in Natural Resource Management (5) REM 613—Methods in Fisheries Assessment (5) REM 625—Risk Assessment and Decision Analysis for Management of Natural Resources (5) REM 644—Public Policy Analysis and Administration (5) REM 646—Environmental and Social Impact Assessment and Environmental Management Systems (5) REM 647—Parks and Outdoor Recreation Planning (5) REM 648—The Tourism System (5) REM 649—Tourism Planning and Policy (5) REM 650—Energy and Materials Management and Policy (5) REM 652—Community Tourism Planning and Development (5) REM 658—Energy and Materials Systems Modeling (5)	Elective Courses <u>Students choose one graduate course (minimum three units) as an elective to support and complement their particular research interests. Students may, in consultation with their senior supervisor, select a REM course or another graduate course.</u>

~~REM 660—Special Topics in Natural
Resources Management (5)~~

~~REM 670—Introduction to Forestry (5)~~

~~any course from approved external curriculum
such as Simon Fraser University's Centre for
Sustainable Community Development, Simon
Fraser University's The City Program, UBC's
School of Community and Regional Planning,
or other relevant Simon Fraser University
courses such as geography and business.~~

Calendar Entry Change for Doctor of Philosophy, School of Resource and Environmental Management, Faculty of Environment

January 28, 2015

Summary of changes:

- Clarify the descriptions of the program requirements and required courses.
- Add the option of substituting an equivalent or more advanced course for one of the required core courses, with the approval of the supervisory committee and the REM graduate studies committee.
- Revise the description of the required minimum grade point average to make it clear that the minimum is an overall A- average across all required core courses rather than an A- average in each course.

Rationale for changes:

- The approved internal REM PhD Handbook includes the possibility of substituting equivalent or more advanced courses for the required core courses listed in the calendar. The calendar does not explicitly set out this option, although the description of the required core courses says that they are the “recommended” courses “normally” selected to fulfill the requirement. The revision will make the calendar correspond with the internal policies set out in the REM PhD Handbook and followed in practice within the department.
- REM policy is that the required minimum grade point average within the PhD program is an overall A- average across all courses. The current wording in the calendar is not clear.

Will this change impact current students? If yes, what is the plan for current students?

- No. These changes will bring the calendar description into line with existing policy and practice in the department.

FROM	TO
Program Requirements Students will complete a total of 23 units (five REM courses), and maintain a minimum A-average in all courses, including both of REM 698 - Field Resource Management Workshop (3) * REM 802 - Research Approaches for REM PhD Students (5) † Students will also complete at least one course in each of the three core areas (environmental sciences, resource and environmental policy and planning, and environmental economics). Although it is strongly recommended that students complete all three core courses in their first fall term, the timing will be determined by the student and the senior supervisor in conjunction with the initial or continuing supervisory committees. The recommended courses to fulfill this requirement are normally REM 611 - Population and Community Ecology (5) REM 621 - Ecological Economics (5) REM 644 - Public Policy Analysis and Administration (5) One of these REM core courses may be waived on the basis of substantial prior experience, with agreement from the supervisory committee, the course instructor, and the graduate studies committee. If a student	Program Requirements Students complete <u>an introductory field course [REM 698], four additional required graduate courses, a comprehensive examination, and a thesis. Students must maintain a minimum A-average across all required courses.</u> <u>Required Courses</u> REM 698 - Field Resource Management Workshop (3) * REM 802 - Research Approaches for REM PhD Students (5) † Students will also complete at least one course in each of three core areas (environmental sciences, resource and environmental policy and planning, and environmental economics). Although it is strongly recommended that students complete all three core courses in their first fall term, the timing will be determined by the student and the senior supervisor in conjunction with the supervisory committee. The recommended courses to fulfill this requirement are normally: REM 611 - Population and Community Ecology (5) REM 621 - Ecological Economics (5) REM 644 - Public Policy Analysis and Administration (5) <u>Substitutions of other graduate courses to fulfill the core requirements may be recommended by the supervisory committee, with the approval of the graduate studies committee.</u> One of these REM core courses may be waived on the basis of substantial prior experience, with agreement from the supervisory committee, the course instructor, and the <u>REM</u>

receives a course waiver, the student is not required to replace the course for which the waiver was received.

Course selection must be approved by the senior supervisor or the supervisory committee, who may recommend additional courses ~~to be completed during the first year~~ to strengthen the student's background in areas directly related to their thesis research. Elective courses may be completed outside of the School of Resource Management (REM). Students who transfer from the REM master's program into the REM PhD program are not required to complete REM 611, 621, 644 and 698 a second time if they have completed these courses with a minimum ~~grade~~ of A- average in all of these courses.

The student's progress will be evaluated annually in accordance with the graduate general regulations.

* normally completed in the first fall term

† normally completed in the second term

graduate studies committee. If a student receives a course waiver, the student is not required to replace the course for which the waiver was received.

Course selection must be approved by the senior supervisor or the supervisory committee, who may recommend additional courses to strengthen the student's background in areas directly related to their thesis research. Elective courses may be completed outside of the School of Resource and Environmental Management. Students who transfer from the REM Master's program into the REM PhD program are not required to complete REM 611, 621, 644 and 698 a second time if they have completed these courses with a minimum of an A- average across all of these courses.

The student's progress will be evaluated annually in accordance with the graduate general regulations.

* normally completed in the first fall term

† normally completed in the second term