S.15-64



Office of Graduate Studies and Postdoctoral Fellows

Simon Fraser University TEL 778.782.3042 gradstudies@sfu.ca Maggie Benston Centre 1100 FAX 778.782.3080 www.sfu.ca/grad 8888 University Drive Burnaby, BC V5A 1S6 MEMORANDUM energe Contraction March 3 2015 ATTENTION Senate DATE Wade Parkhouse, Chair of Senate GS2015.11 FROM No. Graduate Studies Committee (SGSC) RE: Faculty of Environment

For information:

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

<u>School of Resource and Environmental Management</u> 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		o@sfu.ca nv.sfu.ca/
MEMORANDUM				
ATTENTION FROM RE:	Wade Parkhouse, Dean of Graduate Studies Sean Markey, FEnv Associate Dean REM Curriculum Changes: MRM, MRM (Planning), REM PhI		DATE PAGES	February 10, 2015 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.

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

	TASC 1 8888 University Drive, Burnaby, BC Canada V5A 1S6	TEL 778.782.465 FAX 778.782.490	
MEMORANDUM			
ATTENTION	Sean Markey, Associate Dean, Faculty Environment	of DATE	January 30, 2015
FROM	Murray Rutherford, Chair of Graduate	PAGES	1/1
RE:	Studies, REM Program changes for MRM, MRM (Pl	anning), and REM	f PhD
	2 <u>2</u>		

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 <u>Master of Resource Management (MRM)</u>, 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	ТО
Program Requirements	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.	Students complete <u>an introductory field course</u> [REM 698], six 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 are required to complete four 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</u> one.

FROM	ТО
Elective Courses	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.	Students choose four graduate courses (18 units minimum) as electives to support and complement their particular research interests. Students may, in consultation with their senior supervisor, select REM courses and/or other graduate courses.

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Calendar Entry Change for <u>Master of Resource Management (Planning)</u>, 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.

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arded the degree of master ment (planning).
nning stream program is of its focus on the policy, <u>conmental</u> science aspects of d environmental planning.
redited by the Canadian s and the Planning Institute a. A <u>n</u> MRM (Planning) for <u>candidate</u> membership d professional planner and d employment prospects, kshop participation, and al development programs.

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FROM	ТО
Program Requirements	Program Requirements
Required Courses Studente complete a total of 55 units, including	Students complete an introductory field cours [REM 698], nine additional required courses, and a major written research project [REM
all of REM 601 - Social Science of Natural Resources Management (5)	699]. The research project must be presented and defended at an oral defense. In addition, students complete one graduate elective cours
REM 602 - Natural Resource Management II: Advanced Seminar (5)	A minimum of 61 units is required, consisting of 58 required units and three elective units. In exceptional cases, if a student provides
REM 611 - Population and Community Ecology (5)	evidence of advanced education that is equivalent to one of the required courses, a
REM 621 - Ecological Economics (5)	waiver may be granted for that course, thereb reducing the number of required courses by
REM 631 - Earth Systems and Global Change in Environmental Management (5)	one. Prerequisite Courses
REM 641 - Law and Resources (5) REM 642 - Sustainable Community Planning	
and Regional Development (5)	Students must be familiar with the material covered in an undergraduate course in parametric and normalized in the state
REM 643 - Environmental Conflict and Dispute Resolution (5)	parametric and nonparametric statistics. Required Courses
REM 699 - Research Project (10)	Keyun eu Courses
REM 801 - Principles of Research Methods (5)	Students complete a total of 58 units, includin 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</u> Workshop (3)
REM 699 - Research Project (10)
REM 801 - Principles of Research Methods (5)

FROM	ТО
Elective Courses	Elective Courses
Students complete a total of 11 units, including three of	Students choose one graduate course (minimum three units) as an elective to support
REM 610 - Applied Environmental Toxicology and Environmental Management of Contaminants (5)	and complement their particular research interests. Students may, in consultation with their senior supervisor, select a REM course or another graduate course.
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)	

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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.

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