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MEMORANDUM

ATTENTION	Senate	**DATE**	June 15, 2022
FROM	Jeff Derksen, Chair of Senate Graduate Studies Committee (SGSC)		
RE:	Course Changes		

For information:
Acting under delegated authority at its meeting of June 14, 2022, SGSC approved the following course changes, effective **Spring 2023**:

Faculty of Environment
School of Resource and Environmental Management

1) Course Change (title, description): REM 658 Energy and Materials Systems Modeling

Senators wishing to consult a more detailed report of curriculum revisions may do so on the Senate Docushare repository at https://docushare.sfu.ca/dsweb/View/Collection-12682

SFU

DONGYA YANG, PH.D., ASSOCIATE DEAN, RESEARCH AND GRADUATE STUDIES
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MEMO

To: Dr. Jeff Derksen, Dean of Graduate Studies / Chair of SGSC

From: Dr. Dongya Yang, Associate Dean / Chair, Faculty of Environment Graduate Studies Committee

Subject: Course REM-658 title and description change

Date: May 4, 2022

CC: Dr. Jonn Axsen, Graduate Chair of the School of Resource and Environmental Management

The Faculty of Environment Graduate Studies Committee has approved the request from the School of Resource and Environmental Management (REM) for course title and description change of REM-658. Please include this item on the next SGSC agenda.

The suggested changes and the original memo from Dr. Jonn Axsen are attached.

Should you have any questions please feel free to contact me.

Dongya Yang, Ph.D.
Associate Dean, Research and Graduate Studies
Professor of Bioarchaeology

SFU FACULTY OF ENVIRONMENT | RESOURCE AND ENVIRONMENTAL MANAGEMENT

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MEMO

TO:	Dongya Yang, Associate Dean, Faculty of Environment
FROM:	Jonn Axsen, REM GSC Chair
RE:	REM-658 change to title and description
DATE:	April 29, 2022

Dear Dongya,

Please accept the attached form to change the title and description of REM-658. This is a 5-credit elective in REM, which typically has 8 to 15 graduate students enrolled from REM and a variety of other departments at SFU and from other Universities.

The spirit of the course remains as it always has, seeking to train graduate students in modeling and methods relating to social transitions to sustainable systems. Over the last 10 years, the course has expanded somewhat in two ways. First, it used to focus mostly on quantitative modeling methods. Now the course still includes training in modeling methods (optimization and simulation), but adds a few, related modules on additional social science research methods, including survey design and data collection. Second, while the course used to focus on applying these methods to "energy and materials" cases of sustainability, REM-658 now includes a broader range of examples from sustainability systems, including sustainable transportation and resource management. For these reasons, REM would like to update the course title and description.

In short, I believe the proposed changes to title and description maintain the original spirit and content of the course, while better aligning with the what REM-658 has actually been delivering to students over the past decade.

Warm Regards,

Jonn Axsen
REM GSC Chair

SIMON FRASER UNIVERSITY
GRADUATE STUDIES & POSTDOCTORAL FELLOWS

Graduate Course Change

Attach a separate document if more space is required.

Course Subject/Number	Units	Effective Term and Year
REM-658	5	Spring 2023

Course Title: Energy and materials systems modeling

Rationale for Change:

The course still covers energy and materials systems models, but over the last 10 years has expanded to cover several related social science research methods.

Proposed Changes (Check all that apply)

☐ Course number ☐ Units* ☑ Title ☑ Description ☐ Prerequisite ☐ Other _____

Complete only the fields to be changed

FROM	TO
Course Subject/Number	Course Subject/Number
Units	Units*
Course Title Energy and materials systems modeling	Course Title (max 100 characters) Research methods and models for sustainability
Course Short Title	Course Short Title (max 30 characters)
Description Theory, background, and practical experience in the use of a range of techniques for policy modelling of energy and materials flows in society with the aim of demonstrating how more environmentally and socially sustainable trajectories can be achieved. Techniques include: simulation modelling, optimization modelling, econometric and other forms of parameter estimation, input-output modelling, game playing models, and integrated systems models.	Description Theory, background, and practical experience in the use of a range of methods and models related to environment, sustainability, and energy, with the aim of demonstrating how more environmentally and socially sustainable trajectories can be achieved. Techniques include: simulation modelling, optimization modelling, survey design, statistical analysis, discrete choice modeling, and qualitative research methods. .
Prerequisite	Prerequisite
Other	Other

* Program requirements may need to be revised when course units are changed. Please review the calendar and submit any relevant program revisions resulting from this course change.

REMINDER: All course changes must be identified on a cover memo and confirmed as approved when submitted to FGSC and SGSC.

CONTACT PERSON

Department / School / Program	Contact name	Contact email
REM	Jonn Axsen	jaxsen@gmail.com

DEPARTMENTAL APPROVAL

Department Graduate Program Committee Jonn Axsen	Signature Jonn Axsen	Date April 29, 2022
Department Chair Mark Jaccard	Signature	Date May 4, 2022

FACULTY APPROVAL

Faculty Graduate Studies Committee (FGSC) Dongya Yang	Signature Dongya Yang	Date May 4, 2022

SENATE GRADUATE STUDIES COMMITTEE APPROVAL

Senate Graduate Studies Committee (SGSC) Jeff Derksen	Signature	Date June 15, 2022

ADMINISTRATIVE SECTION (for DGS office only)
Course Attribute: _____
Course Attribute Value: _____
Instruction Mode: _____
Attendance Type: _____

If different from regular units:
Academic Progress Units: _____
Financial Aid Progress Units: _____