FACULTY OF SCIENCE ACADEMIC COMMITTEE

Report to Faculty of Science Meeting of 21 October 2014

The Academic Committee approved the following on Tuesday, 23 September 2014 :

SECTION A: New Courses

| 1) | Redpath Museum REDM 511 | Advanced Museum-Based Science 3 credits | AC-14-1 |
|-------------|--|---|---------|
| 2) | Medical Physics MDPH 396 | Undergraduate Research Project 3 credits | AC-14-3 |
| <u>SECT</u> | ON B: (For Informatio | on) | |
| 1) | Computer Science - Cotutelle Program (P | h.D. Program) | AC-14-4 |

| 2) | & RXUVHV RQ 'HDQ¶Wina00yXU60dwirograaduatveFResSearchList(DMURL) | AC-14-2 |
|----|--|---------|
| 3) | B.Sc. Global Designation | AC-14-5 |

ACReportToFacultyMtg21October2014

New Course

Proposal Reference Number: 8959PRN Alias: 14-15#182Version No: 1Submitted By: Ms Marie La RiccaDisplay Printable PDF

| | New Data | | | | |
|-----------------------------------|-------------------------------|--|--|--|--|
| Program Affected? | N | | | | |
| Program Change Form Submitted? | | | | | |
| Subject/Course/Term | REDM 511 | | | | |
| | • one term | | | | |
| Credit Weight or CEU's | 3 credits | | | | |
| Course Activities | Schedule Type | Hours per week | | | |
| | A - Lecture | 2 | | | |
| | M - Seminar | 1 | | | |
| | | Total Hours per Week : 3 Total Number of Weeks : 13 | | | |
| Course Title | Official Course Title : | Advanced Museum-Based Science | | | |
| | Course Title in Calendar : | Advanced Museum-Based Science | | | |
| Rationale | The course integrates t | | | | |
| | | | | | |

| | literature in museum-based science and the major issues challenging the field. Course components will include the weekly Redpath seminar series, and also a 2-hour weekly lecture, presentation, and discussion session. |
|-----------------------------|---|
| Teaching Dept. | 0054 : Redpath Museum |
| Administering Faculty/Unit | SC : Faculty of Science |
| Prerequisites | Evolution (Biol 304), Science and Museums (REDM 400) and permission from instructor. Web Registration Blocked? : N |
| Corequisites | |
| Restrictions | |
| Supplementary Calendar Info | |
| Additional Course Charges | |
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Advanced Museum-Based Science: Testing Adaptive Hypotheses REDM 511 - Course Syllabus

Instructor:

Rowan D H Barrett (Course Coordinator) rowan.barrett@mcgill.ca Office: Redpath 303A; Phone: 398-4086

Workload:

3 credits: 1-hr seminar and 2-hr lecture, presentation, and discussion

Class time and room nuCiTc-T5 OTcOT (#j01137D-OFcReadin 59) T/T41 T9 OTD-OFC() j-9 -1190 DOFc-OF (Selected re 55 se lecture, presentation, and discussion session.

Objectives:

This course is designed to allow senior undergraduate and graduate students to have an advanced understanding of the role of adaptation in the evolutionary process, and teach them how to distinguish between adaptive and non-adaptive explanations of biological phenomena.

Evaluation:

Grades will be based on oral presentations (25%) and leading of discussion sessions (10%), a research project (35%), weekly assignments (20%), and participation in class discussions (10%).

Student presentations: Each week, one student will select a recent research paper that is loosely

aligned with the paper assigned for reading that week (in consultation with the instructor). Both papers will be distributed to the class for reading. Following a 30 minute lecture by the instructor, the student will give a 1 hour seminar based on the papers, and will guide the related discussion (with help from the instructor). Evaluation of the seminar will be based on clarity, sufficient background information, appropriate description and understanding of quantitative methods and results, and sufficient explanation of the significance of the work. Evaluation of the leading of discussion sessions will be based on general knowledgeability about the topic and the quality of prepared discussion points. The readings for the week represent an entry point to the topic but should not be the only sources used to address it.

Geralda Bacaj, Miss

| From: | Geralda Bacaj, Miss |
|----------|------------------------------------|
| Sent: | Friday, September 19, 2014 3:31 PM |
| То: | Geralda Bacaj, Miss |
| Subject: | RE: |

Original Message From: Marie LaRicca Sent: September 16 14 4:02 PM To: Josie D'Amico Subject:

Josie We asked the following departments for consultation: biology Administrative Officer

McGill University 514 398 4086 ext. 3188 514 398 3185 fax

www.mcgill.ca/redpath

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Josie D'Amico

From:Michel F. Lapointe, Prof.Sent:September-09-14 2:25 PMTo:Marie LaRiccaSubject:RE: REDM 511 from Redpath Museum.

Ms La Ricca

Having inspected the proposed course form, the geography department has no objections and indeed encourages its creation .

Prof. Michel Lapointe Chair of Undergraduate Affairs Committee of McGill Geog

-----Original Message-----From: Marie LaRicca [mailto:marie.laricca@mcgill.ca] Sent: Tuesday, September 09, 2014 2:19 PM To: LAPOINTE@GEOG.MCGILL.CA Cc: Rowan Barrett Subject:

Dear Prof. Lapointe,

Enclosed is a course proposal REDM 511 from Redpath Museum. This is being sent to you for course consultation. Could you please send us feedback before September 23rd. The Faculty of Science will be presented this course at this date.

Thank you for your time and your feedback. Sincerely

Marie Passalalpi La Ricca Administrative Officer

McGill University 514-398-4086 ext. 3188 514-398-3185 fax www.mcgill.ca/redpath CONFIDENTIALITY NOTICE : This email may contain information that is privileged and confidential. Please delete immediately if you are not the intended recipient. Ce courriel peut contenir de l'information privilégiée et confidentielle. Nous vous demandons de le détruire immédiatement si vous n'êtes pas le destinataire.

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Josie D'Amico

From: Sent: To: Subject: George McCourt September-10-14 8:21 PM Marie LaRicca RE:

Hi Marie,

The MSE has no objections to this new course proposal (REDM 511).

Thanks!

George

Senior Faculty Lecturer, McGill School of Environment Associate Director Undergraduate Affairs, McGill School of Environment

McGill School of Environment Rowles House, Macdonald Campus of McGill University 21, 111 Lakeshore Road, Ste-Anne-de-Bellevue, QC, H9X 3V9

Tel: 514-398-7550 E-mail: george.mccourt@mcgill.ca

-----Original Message-----From: Marie LaRicca Sent: Wednesday, September 10, 2014 9:17 AM To: George McCourt Cc: Rowan Barrett Subject:

Dear Prof. McCourt,

Enclosed is a course proposal REDM 511 from Redpath Museum. This is being sent to you for course consultation. Could you please send us feedback before September 23rd. The Faculty of Science will be presented this course at this date.

Thank you for your time and your feedback. Sincerely

Marie Passalalpi La Ricca Administrative Officer McGill University 514-398-4086 ext. 3188 514-398-3185 fax From:

Geralda Bacaj, Miss

From: Sent: Geralda Bacaj, Miss

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Original Message From: James Savelle, Prof. Sent: Monday, September 29, 2014 10:29 AM To: Connie Di Giuseppe; Marie LaRicca Cc: Rowan Barrett Subject: RE: Feedback Request RE: Course Proposal REDM 511

Dear Marie;

The course looks to be very interesting, and there is certainly no overlap with anthropology/archaeology.

I assume this is what the consultation request is about?

Regards, James Savelle

Original Message From: Connie Di Giuseppe Sent: Monday, September 29, 2014 8:41 AM To: Marie LaRicca Cc: Rowan Barrett; James Savelle, Prof. Subject: Feedback Request RE: Course Proposal REDM 511

| Dear Marie, | | | |
|-------------|---|---|---|
| 511M | а | r | i |

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Enclosed is a course proposal REDM 511 from

Proposal Reference Number PRN Alias Version No Submitted By Edited By : 8893

: 14-15#116

:3

- : Miss Geralda Bacaj
- : Dr Jan Peter Frans

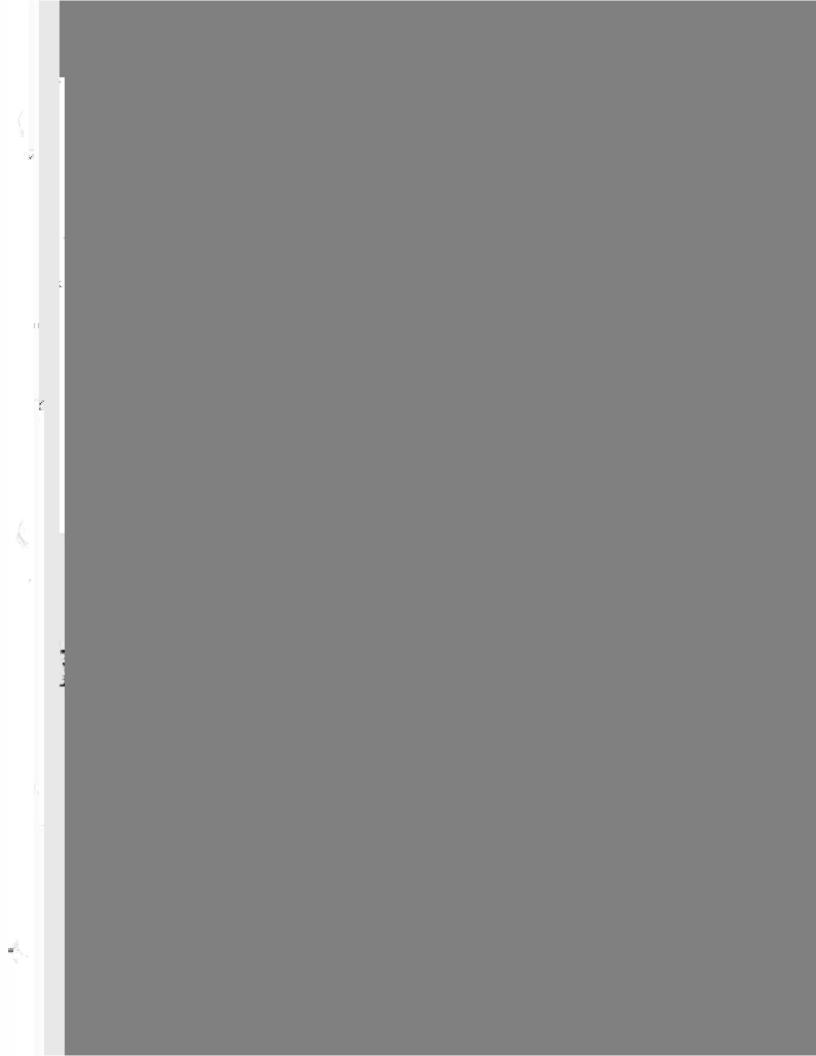
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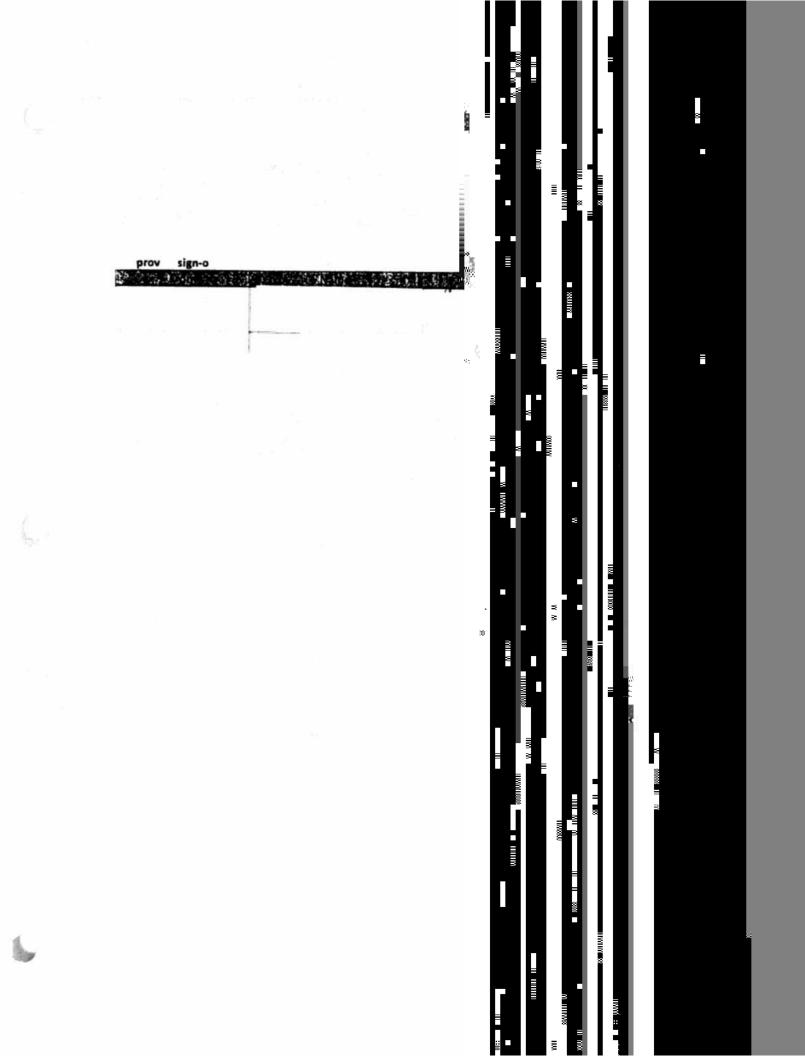
Display Printable PDF

| | New Data | | | | | |
|-----------------------------------|--|--|--|--|--|--|
| Program Affected? | Ν | | | | | |
| Program Change Form Submitted? | | | | | | |
| Subject/Course/Term | MDPH 396 | | | | | |
| | • one term | | | | | |
| Credit Weight or CEU's | 3 credits | | | | | |
| Course Activities | Schedule Type | Hours per week | | | | |
| | PW - Project | 9 | | | | |
| | | Total Hours per Week : 9 Total Number of Weeks : 13 | | | | |
| Course Title | Official Course Title : Undergraduate Research Project | | | | | |
| | Course Title in Calendar :Undergraduate Research Project | | | | | |
| Rationale | This new course coordinated by the Medical Physics Unit is an undergraduate research project course. This course will provide B.Sc. students with research opportunity to work with Medical Physics researchers on a broad range of projects. It will expand the current options available to students and thus further enhance the interdisciplinary nature of the undergraduate program. The course also matches the curriculum goals of the Medical Physics Research Training Network (MPRTN), an NSERC-funded CREATE program in medical physics research training (mprtn.com). This course will be added to the roster of 396 series of Undergraduate Research Projects Courses currently available to Science students (www.mcgill.ca/science/ours/396). | | | | | |
| Responsible Instructor | | | | | | |
| Course Description | Independent research project with a final written report and an oral presentation. | | | | | |
| Teaching Dept. | 0224 : Medical Physics Unit | | | | | |
| Administering Faculty/Unit | YI : Medicine (Non-Tr) | | | | | |

| Completion of at least one undergraduate term with CGPA of 3.0 Web Registration Blocked? : N |
|---|
| |
| This course cannot be taken under the S/U option. Students cannot be supervised by the same instructor for two 396 Science courses. Open to students in programs offered by the Faculty of Science. Since this course takes place within a clinical department and may require access to confidential data, the proposed research project needs departmental approval and may need research ethics board approval. |
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| 2 | | | | Submitted to Department Chair for approval Edited by: Jan Peter Frans Seuntjens on: Aug 1 2014 |
|---|--|--|--|--|
| 1 | | | | Submitted to Department Chair for approval Created on: Jul 31 2014 |





<mark>AC 14</mark> 2, p. 1

No application is necessary for students who have taken courses from the approved list; all B.Sc. and B.A. & Sc. graduating students' records are considered by the Office for Undergraduate Research in Science.

In exceptional circumstances, if students have taken a science research course *not* already on the approved list, and wish for this course to be counted toward the Dean's Multidisciplinary Undergraduate Research List, they must apply. A qualifying course involves a science research project as its primary focus, culminating in a substantive written report. **Ineligible** courses include: reading courses; BASC 396 and BASC 449; and courses offered by the Faculty of Arts. For information on how to apply, students should contact the Office for Undergraduate Research in Science at least 4 months prior to graduation (e.g., February 1, for June graduation; July 1, for November graduation; August 1, for February graduation).

What is the list of approved research-based courses? How was it created and revised?

In 2005, members of the academic committee were asked to propose courses from their units which should be on this list. All courses involve a significant research component and a final written report or thesis. Reading courses were excluded. The list was reviewed and approved at the Academic Committee meeting of December 13, 2005. Since 2005, courses have been added by OURS in consultation with the Associate Dean (Academic), reflecting new course offerings (including three such courses added in 2012-13). The list was also reviewed with the Academic Committee in September 2009, September 2011, September 2012, and September 2013. The current list is given below.

Additions or modifications?

For consideration:

<u>GEOG 460 (Research in Sustainability).</u> Requested by a student. Please see Annex 1. Are there any other courses that should be added to this list, as a result of courses created or modified? Or deletions?

Recent changes, for reference:

EPSC 470: Added 2014-01 GEOG 489: Added 2014-01 PHAR 396: Added 2014-09 PHAR 598: Added 2014-01

Note that future 396 courses (e.g. possible Medical Physics 396) will be added to this list.

About this list:

In the event of course name changes since inception, this is noted in the comments field. Some courses have been removed from this list at the recommendation of the Associate Dean (Academic). They are listed in a separate table below. They have not been offered for several years, or they are currently offered as reading courses but have not been offered as research courses in several years. *Multi-semester courses* (suffix D1/D2, N1/N2) are denoted by "Span course" in the comments field.

Independent studies: research or reading? Courses in which some students are given reading courses and other students are given research projects (i.e., <u>EPSC 482</u>). When OURS reviews dossiers of candidates for graduation to determine their eligibility for DMURL, departmental validation is required to determine whether the course was taken as a reading project or a research project. *These courses are labeled with an asterisk (*) in the table below.* (GEOG 490 **was**

Annex A - GEOG 460 Research in Sustainability (3 credits)

Here is the course description from http://www.mcgill.ca/study/2014-2015/courses/GEOG-460

Overview

Geography: Through engaging in real-world sustainability challenges through hands-on research, learn to critically analyze problems that arise at the interface of multiple disciplines including the scientific-technological, socio-economic, political-institutional, ethical, and human behavioural. Develop an understanding of the leverages and road blocks in achieving a sustainability transition.

Terms: Fall 2014

Instructors: Brian Robinson (Fall)

Fall

Prerequisite: GEOG 360tl[T-0 Tc()Tjyaa0t93514U1a-.4(ty triP,cPleanalsealyzt.15ed for001dew[ed 153 T

B.Sc. Global Designation – Student Information Faculty of Science, McGill University

September 23, 2014

Note: The B.Sc. Global Designation was approved by the Faculty of Science on December 4, 2012. This document and the associated lists of suggested approved courses and draft application form have been prepared as steps in the implementation process.

1. Introduction – What is the B.Sc. Global Designation?

The Faculty of Science B.Sc. Global Designation recognizes Bachelor of Science (B.Sc.) students who have gone beyond a typical B.Sc. experience by broadening their horizons through participation in language classes, the performance of independent research and including the "real-world" (global-related study and/ or non-McGill study or work experience) in their program.

2. Eligibility

To receive the designation of B.Sc. Global at graduation

Exchange: At least one term as an exchange student at a university outside of Montreal (see <u>http://www.mcgill.ca/students/international/goabroad/exchange</u>).

"Global" courses offered within Science or from other faculties: At least three credits from a McGill course with a substantial Global component. Such courses must be at the 200-level or above, and may not be a "General Interest" type of course. Courses from both within Science and in other faculties may be used to satisfy this requirement. A list of pre-approved courses is listed on the Global Designation web site [see Appendix 2]. To apply for a course not currently found on the pre-approved list to be added to the list, please contact the Global Designation Coordinator.

2.3 Other Requirements

Furthermore, considering all qualifying B.Sc. Global Designation courses on your transcript at graduation time:

Appendix 1: Suggested Pre-Approved Field Courses

Field Study Semesters:

Canadian Field Studies in Africa (CFSIA) Panama Field Study Semester (PFSS) Barbados Field Study Semester (BFSS) Barbados Interdisciplinary Tropical Studies (BITS)

Courses:

Note Where applicable, course restrictions are noted according to the list of "Restricted courses outside the Faculty of Science".

BIOL 240 (3) Monteregian Flora (at Mont St. Hilaire) BIOL 331 (3) Ecology/ Behaviour Field Course (at Mont St. Hilaire) BIOL 334 (3) Applied Tropical Ecology (in Barbados) BIOL 335 (3) Marine Mammals (taught at the Huntsman Marine Science Centre, Bay of Fundy, N.B.) BIOL 432 (3) Limnology BIOL 573 (3) Vertebrate Palaeontology Field Course (in Alberta and/ or Saskatchewan) EPSC 231 (3) Field School I EPSC 331 (3) Field School 2 EPSC 341 (3) Field School 3 GEOG 495 (3) Field Studies - Physical Geography (in southern Quebec) GEOG 496 (3) Geographical Excursion (in Barbados) GEOG 499 (3) Subarctic Field Studies (in Schefferville) GEOG 555 (3) Ecological Restoration PLNT 358 (3) Flowering Plant Diversity - on Approved list WILD 401 (4) - Fisheries and Wildlife Management - on neither the Approved nor Not Approved list WILD 475 (3) Desert Ecology (Arizona, Colorado, Utah) - on neither the Approved nor Not Approved list

Appendix 3: Draft Application Form for B.Sc. Global Designation