



1. Will this new course affect a current program? Yes No
 If "yes", has a Program Revision Form been submitted concurrently? Yes No

2. Teaching Department:

3. Administering Faculty/Unit:

6. Responsible Instructor

4. Campus (Downtown, Macdonald, Off Campus, Distance Ed, Other – specify)

5. Effective Term of Implementation (Ex. Sept. 2004 = 200409)

Term:

7. Course Title (Limit 30 Characters) - required for all courses:

9. Course Title to Appear in the Calendar (optional) (Limit 59 characters):
 Note: This can ONLY be an expansion of word(s) abbreviated in the 30 character course title above.

10. Credit Weight (or CEU's for non-credit CE courses):

8. Course Number(s)
 Indicate course number & the number of terms spanned: (tick all that apply)

Subject/course number:

- Course(s) Span:
- 1 term
 - 2 consecutive terms (D1, D2)
 - 2 non-consecutive terms (N1, N2)
 - 3 consecutive terms (J1, J2, J3)

11. Rationale for new course

12. Course Description (as it will appear in the Calendar [maximum 50 words]):
(N.B. Faculty of Medicine must append complete course outline)

13. Supplementary information to appear in the Calendar in addition to the course description.
 Such as: equivalent course(s), contact hours, enrolment limitations, language of instruction etc.
 Please enter the information as it should appear in the calendar notes.

14. Schedule Types(s):
 (Enter all that apply – see course guidelines for a complete list.)
 (i.e. Lecture, Labs, Tutorial)

Hours per Week	Hours per Week	Hours per Week
_____ <input style="width: 50px; height: 20px;" type="text"/>	_____ <input style="width: 50px; height: 20px;" type="text"/>	_____ <input style="width: 50px; height: 20px;" type="text"/>
_____ <input style="width: 50px; height: 20px;" type="text"/>	_____ <input style="width: 50px; height: 20px;" type="text"/>	_____ <input style="width: 50px; height: 20px;" type="text"/>
		Total Hours per Week: <input style="width: 50px; height: 20px;" type="text"/>
		Total Number of Weeks: <input style="width: 50px; height: 20px;" type="text"/>

15. Projected Enrolment:

16. Required text and/or preliminary reading list sent to library?

Yes No

17. Prerequisite(s) (Courses or Tests)
 Specify course number(s) or name(s) of test(s):

If the student does not have a prerequisite should web registration be blocked?

Yes No

If "Yes" complete A and B:

A. Indicate minimum grade or test score(s) the student must attain in prerequisite course(s) or test(s):

B. Can the prerequisite course(s) or test(s) be taken in the same term as this course?

Yes No

18. Corequisite(s) Course Number(s):
 Specify course number(s) and title(s):

If the student does not register for the corequisite in the same term should web registration be blocked?

Yes No

19. Restriction(s):

20. Consultation Reports Attached

Yes N/A

21. Additional Course Charges (must be approved by the Fee Policy Committee)

Description of Fee (e.g. screening fee)	Amount
<input style="width: 95%; height: 20px;" type="text"/>	<input style="width: 95%; height: 20px;" type="text"/>

22. Requires Teaching, Physical, or Financial Resources Not Currently Available (attach explanation)

Yes No

INFORMATION FOR ADMISSIONS, RECRUITMENT & REGISTRAR'S OFFICE

To be completed by the Faculty

Slot Course: Yes No

Thesis Component: Yes No

To be completed by ARR

CIP Code

For Continuing Education Use

CE Admin. Unit :

CE Non-Grant Courses:

Flat Rate: CdnFlat Rate: Yes N/A

23. Approvals:

Routing Sequence	Departmental Meeting	Departmental Chair	Other Faculty	Curric/Academic Committee	Faculty	SCTP
Name	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Signature	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Date	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Departmental Contact Person (name/phone/email)	<input type="text"/>					

ARCTIC GEOLOGY

EPSC 373

- Instructors:** **Hans Larsson**
Redpath Museum, room 304,
514.398.4086x089457, hans.ce.larsson@mcgill.ca
Boswell Wing
Earth and Planetary Sciences, FDA 335
514.398.6772, boswell.wing@mcgill.ca
- Prerequisites:** Nunavut Arctic College Environmental Technology Program students require completion of Year 1.
McGill students require at least two of the following: EPSC210, EPSC212, EPSC220, EPSC233, GEOG203, GEOG 205, GEOG272, GEOG372, ENVR 200, ENVR 202, EPSC203, ATOC214, ATOC215, ATOC219, SOIL300
Students without these prerequisites should discuss their preparation with the course instructors.
- Content:** This course introduces students to the principles of the geology of the Canadian Arctic. The primary objectives of the course are to train students in theory and practice of geology in the Canadian Arctic. Practical training includes drill core logging, surveying, mapping, sample collecting, and geological interpretations.
- Format:** 10-14 days of a field course based in an Arctic locality. Each day will have two hours of morning lectures and five hours of afternoon fieldwork. Lectures may take place in a building, shelter, or in a field camp.
- Text:** The majority of the course material will be presented during lectures and a booklet of all course lectures and materials will be provided to all students. A small library of relevant articles and books will be available throughout the course.
- Evaluation:** Assessment of field books (20%, individual grade); final oral exam on lecture & field material (30%, individual grade); group solutions to geological exercises (20%, group grade); presentation and written report on group project (30%, group grade).
- Equipment:** All course materials and equipment will be provided. Personal equipment such as sleeping bags, field clothing and toiletries will be the responsibility of the student. An equipment list students are required to bring will be provided and will vary with the location of the course.
- Registration:** All students taking the course must be registered for the summer 2012 semester at McGill. When non-McGill students do so, they will receive a McGill student number to allow them to register for the course. Information for summer registration can be found at: <http://www.mcgill.ca/summer/credit>.

"McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/integrity/ for more information)."

"In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded."

ARCTIC GEOLOGY

EPSC 373

Course schedule

Classes

Lecture 1	Introduction and review of geological time and geological processes including plate tectonics
Lecture 2	The unique geological environment of the Canadian Arctic
Lecture 3	Igneous rocks in theory and in the field
Lecture 4	Metamorphic rocks in theory and in the field
Lecture 5	Sedimentary rocks in theory and in the field
Lecture 6	Arctic Archean rocks
Lecture 7	Arctic Proterozoic rocks
Lecture 8	Arctic Paleozoic rocks
Lecture 9	Arctic Mesozoic and Cenozoic rocks
Lecture 10	Geology of Earth system processes – the Arctic perspective
Lecture 11	Evolution of Arctic geology and palaeobiology
Lecture 12	Synthesis and future of Arctic geology

Fieldwork

Fieldwork 1	Identification of rocks in the field I - Outcrops
Fieldwork 2	Identification of rocks in the field II - Drill cores
Fieldwork 3	Arctic navigation – Topographic maps, GPS and Brunton compass
Fieldwork 4	Geological mapping I – Gridding and detailed outcrop maps
Fieldwork 5	Geological mapping II – Measuring and interpreting stratigraphic sections
Fieldwork 6	Geological mapping III – The art and science of correlation
Fieldwork 7	Project research fieldwork
Fieldwork 8	Project research fieldwork
Fieldwork 9	Project research fieldwork
Fieldwork 10	Project research fieldwork
Fieldwork 11	Project research – analysis, write-up, and presentation preparation
Fieldwork 12	Present projects for peer-review

ARCTIC GEOLOGY

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Supplementary Reading List

Harrison, J.C., St-Onge, M.R., Petrov, O. Strelnikov, S., Lopatin, B., Wilson, F., Tella, S., Paul, D. Lynds, T., Shokalsky, S., Hults, C., Bergman, S., Jepsen, H.F., and Solli, A. (2008) Geological map of the Arctic. Geological Survey of Canada, Open File 5816.

Available for download at: http://apps1.gdr.nrcan.gc.ca/mirage/full_result_e.php?id=225705

Eyles, N., and Miall, A. (2007) Building Arctic Canada. Ch. 7 in Canada Rocks: The Geologic Journey, Fitzhenry & Whiteside, Markham ON.