CGPS.12.47
12-SCTP-04-18 REVISED.
CGPS APPENDIX D

McGill

New Program/Major or Minor/Concentration Proposal Form

(07/2004)

1.0 Degree Title
Please specify the two degrees for concurrent degree programs

PhD

1.1 Major (Legacy= Subject)(30-char. max.)

Educational Studies

1.2 Concentration (Legacy = Concentration/Option) If applicable to Majors only (30 char. max.)

Mathematics and Science Education

1.3 Minor (with Concentration, if Applicable) (30 char. max.)

2.0 Administering Faculty/Unit

Graduate Studies

Offering Faculty/Department

Education/Integrated Studies in Education

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

201309

4.0 Rationale for new proposal

There is a growing recognition of the need to improve mathematics, science, technology, and engineering education in society. At present, the Faculty of Education does not include a concentration focused on math and science educational research at the graduate level. However, the Faculty has made recent strides to increase their commitment to developing this area of research and practice. The proposed concentration will meet the growing national and international needs for the preparation of educational researchers and teacher educators who are grounded in math and science education and teacher education research. Graduates will be well prepared

5.0 Program Information
Please check appropriate box(es)

5.1 Program Type
- ☐ Bachelor's Program
- ☐ Master's
- ☐ M.Sc. (Applied) Program
- ☐ Dual Degree/Concurrent Program
- ☐ Certificate
- ☐ Diploma
- ☐ Graduate Certificate
- ☐ Graduate Diploma
- ☒ Ph.D. Program
- ☐ Doctorate Program (Other than Ph.D.)
- ☐ Private Program
- ☐ Off-Campus Program
- ☐ Distance Education Program (By Correspondence)
- ☐ Other (Please specify)

5.2 Category
- ☐ Faculty Program (FP)
- ☐ Major
- ☐ Joint Major
- ☐ Major Concentration (CON)
- ☐ Minor
- ☐ Minor Concentration (CON)
- ☐ Honours (HON)
- ☐ Joint Honours Component (HC)
- ☐ Internship/Co-op
- ☐ Thesis (T)
- ☐ Non-Thesis (N)
- ☐ Other

Please specify

5.3 Level
- ☐ Undergraduate
- ☐ Dentistry/Law/Medicine
- ☐ Continuing Ed (Non-Credit)
- ☐ Collegial
- ☐ Masters & Grad Dips & Certs
- ☒ Doctorate
- ☐ Post-Graduate Medicine/Dentistry
- ☐ Graduate Qualifying
- ☐ Postdoctoral Fellows

6.0 Total Credits

0

7.0 Consultation with
Related Units Yes ☒ No ☐
Financial Consult Yes ☐ No ☐
Attach list of consultations.

8.0 Program Description (Maximum 150 words)

Ph.D. in Educational Studies; Mathematics and Science Education

This PhD concentration emphasizes research in mathematics and science education, including a specific focus on teacher education in the area of math and science. The program will include targeted opportunities for candidates to develop skills, knowledge and practices specific to teaching and learning mathematics and science, mathematics and science teacher preparation, and research in both of these areas. It will produce graduates who view improving mathematics and science education from a teaching and learning perspective, have sufficient research experience to conduct empirical research in math and science education, and sufficient teacher education experience to assume roles as teacher educators in university or other settings.

9.0 List of proposed program for the New Program/Major or Minor/Concentration.

If new concentration (option) of existing Major/Minor (program), please attach a program layout (list of all courses) of existing Major/Minor.

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight under the headings of: Required Courses, Complementary Courses, Elective Courses)

(Rationale continued)
to take academic positions in math or science education. This concentration will also formally align McGill's Faculty of Education to other top research institutions with similar programs.

Proposed Ph.D. in Educational Studies; Mathematics and Science Education (0 CR.)
Required Courses (17 credits)
EDEC 700 (2) Proseminar in Education 1
EDEC 702 (2) Proseminar in Education 2
EDEC 703 (2) Ph.D. Colloquium 1
EDEC 704 (2) Ph.D. Colloquium 2
EDEC 701 (0) Comprehensive Examination
EDEC 708 (3) Ph.D. Seminar in Math and Science Education 1
EDEC 709 (3) Ph.D. Seminar in Math and Science Education 2
EDEC 624 (3) Researching Teaching, Learning, and Teacher Education

Complementary Courses (0-6 credits)
0-3 credits of advanced quantitative methods, as listed below. Students who have taken an equivalent course in quantitative methods, or are currently taking an equivalent course as part of their Ph.D. program requirements, will be deemed to have satisfied these credits.

EDPE 682 (3) Univariate/Multivariate Analysis

0-3 credits of qualitative methods or advanced research design from the following. Students who have taken an equivalent course in qualitative methods or advanced research design, or are currently taking an equivalent course as part of their Ph.D. program requirements, will be deemed to have satisfied these credits.

EDEC 705 (3) Advanced Research Designs
EDEC 706 (3) Textual Approaches to Research
EDEC 707 (3) Interpretive Inquiry
EDSL 630 (3) Qualitative/Ethnographic Methods
EDSL 664 (3) Second Language Research Methods
EDEM 692 (3) Qualitative Research Methods

Elective Courses (0-9 credits)
Depending on the student's prior coursework and in consultation with the Supervisor and/or Doctoral Advisory Committee, an additional 0-9 credits of elective courses at the 500 level or higher may be required.

Dissertation.

See next page for existing Ph.D. in Educational Studies.

Attach extra page(s) as needed

Existing Ph.D. in Educational Studies (0 CR.)

Required Courses (8 credits)
EDEC 700 (2) Proseminar in Education 1
EDEC 702 (2) Proseminar in Education 2
EDEC 703 (2) Ph.D. Colloquium 1
EDEC 704 (2) Ph.D. Colloquium 2
EDEC 701 (0) Ph.D. Comprehensive Examination
(Normally taken at the end of the second year for Ph.D. 2 program entrants and at the end of the third year for Ph.D. 1 entrants.)

Complementary Courses (3 credits)
One of:
EDEC 705 (3) Advanced Research Designs
EDEC 706 (3) Textual Approaches to Research
EDEC 707 (3) Interpretive Inquiry
EDSL 630 (3) Qualitative/Ethnographic Methods
EDSL 664 (3) Second Language Research Methods
EDEM 692 (3) Qualitative Research Methods

Elective Courses (0 - 12 credits)
Elective courses required in the student's Ph.D. plan of study will be determined in consultation with the Doctoral Advisory Committee depending on the student's background and research interests.
Students admitted to Ph.D. 2 will normally take up to 12 credits of electives under the advice of their Doctoral Advisory Committee.
Students admitted to Ph.D. 1, without an M.A., may be advised by their Doctoral Advisory Committee to take more than 12 credits of electives depending on their background. If admitted to the program without at least six credits of M.A.-level research methods and/or statistics courses, candidates may be expected to take such courses during their first year of study as advised.

These may be selected from current offerings of research methods courses either within or outside the Department, such as:
EDEM 690 (3) Research Methods: Philosophy and Practice
EDEM 692 (3) Qualitative Research Methods
EDSL 630 (3) Qualitative/Ethnographic Methods
EDSL 664 (3) Second Language Research Methods

Students required by their Doctoral Advisory Committee to take graduate courses in statistics will select from a range of courses, such as the following:
EDPE 575 (3) Educational Measurement
EDPE 676 (3) Intermediate Statistics
EDPE 682 (3) Univariate/Multivariate Analysis

Dissertation

8.0 Consultation with Related Units ☐ Yes ☐ No Financial Consult ☐ Yes ☐ No

Attach list of consultations

9. Approvals

Routing Sequence	Name	Signature	Date
Department	RALF ST. CLAIR		APR 2013
Curric/Acad Committee			
Faculty 1	ELIZABETH WOOD		APR 2 2013
Faculty 2			
Faculty 3			
SCTP	SCTP APPROVED		MAY 9 , 2013
GS			
APPC			
Senate			

Submitted by

Name	
Phone	
Email	
Submission Date	

To be completed by ARR:

CIP Code