



McGill

New Program/Major or Minor/Concentration Proposal Form

(2013)

<p>1.0 Degree Title Please specify the two degrees for concurrent degree programs</p> <p>Master of Science, Applied (M.Sc.A.)</p>	<p>2.0 Administering Faculty/Unit</p> <p>Graduate and Postdoctoral Studies</p>
<p>1.1 Major (Legacy= Subject)(30-char. max.)</p> <p>Animal Science</p>	<p>Offering Faculty/Department</p> <p>FAES / Animal Science</p>
<p>1.2 Concentration (Legacy = Concentration/Option) If applicable to Majors only (30 char. max.)</p> <p>Sustainable Agriculture Option</p>	<p>3.0 Effective Term of Implementation (Ex. Sept. 2004 = 200409) Term</p> <p>201809</p>
<p>1.3 Minor (with Concentration, if Applicable) (30 char. max.)</p> <p>N/A</p>	

4.0 Rationale and Admission Requirements for New Proposal

This program has been designed to attract students who want to do a non-thesis graduate degree, but still carry out a research project in animal science, focusing on sustainable agriculture. The required coursework will give students the foundations that they require to carry out their research project. Additional coursework will focus on areas of sustainability related primarily to animal science.

5.0 Program Information
Please check appropriate box(es)

<p>5.1 Program Type</p> <p><input type="checkbox"/> Bachelor's Program</p> <p><input type="checkbox"/> Master's</p> <p><input checked="" type="checkbox"/> M.Sc. (Applied) Program</p> <p><input type="checkbox"/> Dual Degree/Concurrent Program</p> <p><input type="checkbox"/> Certificate</p> <p><input type="checkbox"/> Diploma</p> <p><input type="checkbox"/> Graduate Certificate</p> <p><input type="checkbox"/> Graduate Diploma</p> <p><input type="checkbox"/> Ph.D. Program</p> <p><input type="checkbox"/> Doctorate Program (Other than Ph.D.)</p> <p><input type="checkbox"/> Private Program</p> <p><input type="checkbox"/> Off-Campus Program</p> <p><input type="checkbox"/> Distance Education Program (By Correspondence)</p> <p><input type="checkbox"/> Other (Please specify)</p> <p></p>	<p>5.2 Category</p> <p><input type="checkbox"/> Faculty Program (FP)</p> <p><input type="checkbox"/> Major</p> <p><input type="checkbox"/> Joint Major</p> <p><input type="checkbox"/> Major Concentration (CON)</p> <p><input type="checkbox"/> Minor</p> <p><input type="checkbox"/> Minor Concentration (CON)</p> <p><input type="checkbox"/> Honours (HON)</p> <p><input type="checkbox"/> Joint Honours Component (HC)</p> <p><input type="checkbox"/> Internship/Co-op</p> <p><input type="checkbox"/> Thesis (T)</p> <p><input checked="" type="checkbox"/> Non-Thesis (N)</p> <p><input type="checkbox"/> Other Please specify</p> <p></p>	<p>5.3 Level</p> <p><input type="checkbox"/> Undergraduate</p> <p><input type="checkbox"/> Dentistry/Law/Medicine</p> <p><input type="checkbox"/> Continuing Ed (Non-Credit)</p> <p><input type="checkbox"/> Collegial</p> <p><input checked="" type="checkbox"/> Masters & Grad Dips & Certs</p> <p><input type="checkbox"/> Doctorate</p> <p><input type="checkbox"/> Post-Graduate Medicine/Dentistry</p> <p><input type="checkbox"/> Graduate Qualifying</p> <p><input type="checkbox"/> Postdoctoral Fellows</p> <p>5.4 FQRSC (Research) Indicator (for GPS) Yes No</p>
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<p>6.0 Total Credits</p> <p>45</p>	<p>7.0 Consultation with Related Units Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Financial Consult Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Attach list of consultations.</p>
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8.0 Program Description (Maximum 150 words)

Climate change and rising human population have increased the need for sustainable agricultural practices. The Sustainable Agriculture option is taken with a M.Sc. Applied (Non-Thesis) program, and designed for students who wish to supplement their basic degree with graduate studies in animal science, with a specific focus on sustainability and agriculture. Students will be exposed to different approaches to improve the sustainability of agricultural systems through specialized coursework and a research project. The degree requirements include 15 credits of coursework focused on sustainability, 15 credits in complementary and elective courses from the Department of Animal Science and other academic units, as well as a 15-credit research project.

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)

Program Requirements

The program aims to provide graduate training in applied areas of animal production with a view toward integrating technology and management in animal production with allied areas of agricultural resource utilization.

Project component - Required (15 credits)

- ANSC 643 Project 1 (3)
- ANSC 644 Project 2 (3)
- ANSC 645 Project 3 (3)
- ANSC 646 Project 4 (3)
- ANSC 647 Project 5 (3)

Required Courses (12 credits)

- ANSC 555 The Use and Welfare of Animals (3)
- BREE 533 Water Quality Management (3)
- IGFS 611 Advanced Issues on Development, Food and Agriculture (3)
- PLNT 602 Advances in Agronomy (3)

Complementary Course List 1 (3 credits)

- AEMA 610 Statistical Methods 2 (3)
- AEMA 611 Experimental Designs 1 (3)
- AEMA 614 Temporal and Spatial Statistics 1 (3)

Complementary Course List 2 (9 - 15 credits)

At least 9 credits from the following list:




- ANSC 530 Experimental Techniques in Nutrition (3)
- ANSC 551 Carbohydrate and Lipid Metabolism (3)
- ANSC 552 Protein Metabolism and Nutrition (3)
- ANSC 560 Biology of Lactation (3)
- ANSC 565 Applied Information Systems (3)
- ANSC 637 Livestock Breeding Systems (3)
- ANSC 604 Advanced Animal Biotechnology (3)
- ANSC 611D1 / D2 Advanced Reproductive Biology (2 x 1½)
- ANSC 622 Experimental Techniques in Animal Science (3)
- ANSC 635 Vitamins and Minerals in Nutrition (3)
- FDSC 545 Advances in Food Microbiology (3)
- PLNT 662 Advances in Plant Biotechnology (3)

Complementary Course List 3 (0 - 6 credits)

Sufficient 500-, or 600-level courses (with Advisor's approval) to bring the total credits to 45.

Attach extra page(s) as needed

10.0 Approvals

Routing Sequence	Name	Signature	Date
Department	Kevin Wade	 <small>Digitally signed by Kevin Wade Date: 2017.11.13 17:38:50 -0500</small>	November 13, 2017
Curric/Acad Committee	Marilyn E. Scott		2017-10-30
Faculty 1	J. Ten Eyck		2018-01-19
Faculty 2			
Faculty 3			
CGPS			
SCTP			
APC			
Senate			

Submitted by

Name	Kevin Wade	To be completed by ARR:
Phone	7973	CIP Code
Email	kevin.wade@mcgill.ca	
Submission Date	November 13, 2017	

Current Program Listing

Master of Science, Applied (M.Sc.A.) Animal Science (Non-Thesis) (45 credits)
Offered by: Animal Science Degree: Master of Science Applied

Program Requirements

The program aims to provide graduate training in applied areas of animal production with a view toward integrating technology and management in animal production with allied areas of agricultural resource utilization.

Research Project (15 credits)

- ANSC 643 Project 1 (3 credits)
- ANSC 644 Project 2 (3 credits)
- ANSC 645 Project 3 (3 credits)
- ANSC 646 Project 4 (3 credits)
- ANSC 647 Project 5 (3 credits)

Complementary Courses (30 credits)—

15-30 credits from the following:

- AEMA 610 Statistical Methods 2 (3 credits)
- ANSC 504 Population Genetics (3 credits)
- ANSC 530 Experimental Techniques in Nutrition (3 credits)
- ANSC 551 Carbohydrate and Lipid Metabolism (3 credits)
- ANSC 552 Protein Metabolism and Nutrition (3 credits)
- ANSC 560 Biology of Lactation (3 credits)
- ANSC 565 Applied Information Systems (3 credits)
- ANSC 600 Advanced Eukaryotic Cells and Viruses (3 credits)
- ANSC 604 Advanced Animal Biotechnology (3 credits)
- ANSC 605 Estimation: Genetic Parameters (3 credits)
- ANSC 606 Selection Index and Animal Improvement (3 credits)
- ANSC 622 Experimental Techniques in Animal Science (3 credits) *
- ANSC 635 Vitamins and Minerals in Nutrition (3 credits)
- ANSC 636 Analysis—Animal Breeding Research Data (3 credits)
- ANSC 691 Special Topic: Animal Sciences (3 credits)
- ANSC 692 Topic in Animal Sciences 1 (3 credits)

0-15 credits selected from 500- and 600-level courses from across the Faculty (with the possibility of up to 9 credits from outside the Faculty if deemed appropriate by the supervisor).

* Recently revised to "Experimental Techniques in Animal Science"

**CONSULTATION REPORT FORM
RE PROGRAM PROPOSAL**

DATE: January 23, 2018
TO: Martina Stromvik, Chair
Department of Plant Science
FROM: Joanne Ten Eyck

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.


Complete Program Title:

M.Sc. (Applied) in Animal Science, Sustainable Agriculture option

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

 X **NO OBJECTIONS** _____ **SOME OBJECTIONS**

COMMENTS:

Signature:  _____
Date: Jan 25, 2018

**CONSULTATION REPORT FORM
RE PROGRAM PROPOSAL**

DATE: January 23, 2018
TO: Kevin Wade, Chair
Department of Animal Science
FROM: Joanne Ten Eyck

The attached proposals have been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

Complete Program Title:

M.Sc. (Applied) in Plant Science
M.Sc. (Applied) in Plant Science, Sustainable Agriculture option

Would you be good enough to review these proposals and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposals. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

X **NO OBJECTIONS** _____ **SOME OBJECTIONS**

COMMENTS:

Animal Science whole-heartedly supports this joint approach to an option in Sustainable Agriculture in the MSc Applied, and has no objection to the inclusion, in both programs, of the stated 500- and 600-level courses, that come over under the purview of Animal Science.

Signature:  _____

Date: February 23, 2018

**CONSULTATION REPORT FORM
RE PROGRAM PROPOSAL**

DATE: January 23, 2018
TO: Brian Driscoll, Chair
Department of Natural Resource Sciences
FROM: Joanne Ten Eyck

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.


Complete Program Title:

M.Sc. (Applied) in Plant Science, Sustainable Agriculture option

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

 X **NO OBJECTIONS** _____ **SOME OBJECTIONS**

COMMENTS:

Signature:  _____
Date: **January 23, 2018**

**CONSULTATION REPORT FORM
RE PROGRAM PROPOSAL**

DATE: January 23, 2018
TO: Varoujan Yaylayan, Chair
Department of Food Science and Agricultural Chemistry
FROM: Joanne Ten Eyck

The attached proposals have been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

Complete Program Title:

M.Sc. (Applied) in Animal Science, Sustainable Agriculture option
M.Sc. (Applied) in Plant Science, Sustainable Agriculture option

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

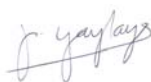
X

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

Signature:



Date:

January 24, 2018

APPENDIX 1

**CONSULTATION REPORT FORM
RE PROGRAM PROPOSAL**

DATE: October 4, 2017

TO: Prof Valerie Orsat, Chair, Bioresource Engineering

FROM: Prof Martina Stromvik, Chair, Plant Science

The attached proposals have been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

Complete Program Title:

MSc (Applied) Animal Science, option Sustainable Agriculture

MSc (Applied) Plant Science, option Sustainable Agriculture

Would you be good enough to review these proposals and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposals. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

X _____ **NO OBJECTIONS** _____ **SOME OBJECTIONS**

COMMENTS:

BREE is in agreement

Signature:



Date:

October 16th, 2017

Joanne TenEyck

From: Hugo Ramiro Melgar-Quiñonez, Dr.
Sent: January-26-18 10:59 AM
To: Joanne TenEyck
Cc: Martina Stromvik, Dr.; Kevin Wade, Dr.
Subject: Re: M.Sc. (A.) in Animal Science - new option in Sustainable Agriculture

Importance: High

Dear Joanne,
 Sorry for the delay in responding. I have been away during the last couple of weeks.
 Hereby I confirm I have no objection.
 Many thanks,
 Hugo

Sent from my LG Mobile

----- Original message-----

From: Joanne TenEyck
Date: Tue, Jan 23, 2018 9:20 AM
To: Hugo Ramiro Melgar-Quiñonez, Dr.;
Cc: Martina Stromvik, Dr.;Kevin Wade, Dr.;
Subject:RE: M.Sc. (A.) in Animal Science - new option in Sustainable Agriculture

Hugo,

Could you please confirm you have no objection to the inclusion of IGFS in the attached programs.

Thanks.

Joanne

-----Original Message-----

From: Kevin Wade [<mailto:kevin.wade@mcgill.ca>]
 Sent: November-15-17 12:34 PM
 To: Hugo Ramiro Melgar-Quiñonez, Dr. <hugo.melgar-quinonez@mcgill.ca>
 Cc: Humberto Monardes, Dr. <humberto.monardes@mcgill.ca>; Joanne TenEyck <joanne.teneyck@mcgill.ca>; Martina Stromvik, Dr. <martina.stromvik@mcgill.ca>
 Subject: M.Sc. (A.) in Animal Science - new option in Sustainable Agriculture

Dear Hugo,

Both Animal Science and Plant Science are proposing a new option under our respective MScA offerings in the area of Sustainable Agriculture.

We are (both) proposing that IGFS 611 be a required course in the option (the Animal Science submission is attached but the Plant Science is identical for the required courses).

Please advise me (and Joanne) if you or the course instructor have any objections to us promoting this course as part of our option.

Kind regards,

Kevin.

Kevin Wade, PhD, Chair
Department of Animal Science
McGill University

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