FACULTY OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES, INCLUDING SCHOOL OF DIETETICS AND HUMAN NUTRITION

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1. The Faculty, page 301

variety of health, education, business, government and community agencies.

The Institute of Parasitology offers graduate programs leading to M.Sc. and Ph.D. degrees as well as a Graduate Certificate in Biotechnology. Major areas of research include the molecular biology, immunology, and population biology of parasites and their hosts and the biochemical pharmacology of antiparasite drugs. The underlying orientation of all research is to apply relevant modern biological techniques to reduce parasite transmission and to improve methods of diagnosis and control. The research background and activities of the staff encompass many disciplines applied to the study of host-parasite interactions, ranging from research involving viruses and cancer cells to studies on protozoa and helminth parasites of humans, livestock, and other animals. The Institute has been designated by the Quebec Government as a Centre d'excellence for research on parasites.

1.3.1 Co-op Experience

Most undergraduate programs offered in the Faculty include the opportunity for a Co-op work experience.

Students are able to profit from a Co-op experience of approximately 12 weeks duration where they will be exposed to the main areas of operation of their employer. Each student registered in a Co-op work experience will benefit from a program developed by both the employer and the instructor exclusively for that individual student.

Students who register for a Co-op experience benefit from practical learning arising from work-term employment in a meaningful job situation. Students also benefit from the non-tangible learning experience arising from the increased responsibilities required to obtain and successfully complete the work term.

1.4 Macdonald Campus Facilities

The Morgan Arboretum has over 245 hectares of managed and natural woodlands and tree plantations used for environmental

Laird Hall, with a capacity of more than 210 students, is arranged on a co-educational basis and provides single and double room accommodation for both undergraduate and graduate students.

The EcoResidence, Canada's first ecologically-friendly student residence and recent winner of the prix d'excellence from l'Ordre des architectes du Québec, accommodates 100 students in apartment-style living.

For further information, please refer to "University Residences – Macdonald Campus" on page 42 or the Faculty Website, www.mcgill.ca/macdonald/resources, or e-mail: residences@macdonald.mcgill.ca.

4.3 Extracurricular Activities

All undergraduate, postgraduate, and Farm Management and Technology students are members of the Macdonald Campus Students' Society. The MCSS, through the 19-member Students' Council, is involved in numerous campus activities such as social events, academic affairs, and the coordination of clubs and organizations. Student life is informal and friendly and student groups range from the Outdoor Adventure Club to the Photography Society. Major social events include Orientation, the Halloween Party, Winter Carnival and International Night. The Ceilidh, a student-run bar located in the Centennial Centre, is open every Thursday night.

The Centennial Centre is the students' building and the centre of student life, offering facilities for student activities, such as meeting rooms, a Yearbook room, pool tables, great places to relax, listen to music and meet friends. Also located in the Centre are the Students' Council offices, an information desk, the Robber's Roost Campus Bookstore and cafeteria.

4.4 Student Conduct and Discipline

The Associate Vice-Principal (Macdonald Campus) and Dean of the Faculty of Agricultural and Environmental Sciences has jurisdiction over all offenses committed by students registered at Macdonald and over all offenses committed by students on or about the Macdonald Campus. Directors of residences have jurisdiction over all offenses committed in or about their respective residences

Students found guilty of improper conduct, violation of rules or willful damage to persons or property, shall be liable to discipline as set forth in the Code of Student Conduct and Disciplinary Procedures as printed in the *Handbook* of *Student Rights and Responsibilities*. A copy of the Handbook can be found on the Web at www.mcgill.ca/secretariat/statutes or obtained from the Student Affairs Office or the Macdonald Campus Student Services Office. The Code specifies that discipline may include: imposition of fines or assessments for damage caused by individuals or groups; posting of security for good behaviour; reprimand; imposition of conduct probation; suspension or expulsion from classes or residence; expulsion from the University.

4.5 Fees

The University reserves the right to make changes without notice in its published scale of tuition, residence and other fees.

All certified cheques, money orders, etc., should be drawn to the order of McGill University, and made payable in Canadian funds. Payment of student fees can also be made through any Chartered Bank in Canada.

The University shall have no obligation to issue any transcript of record, award any diploma or re-register a student in case of non-payment of tuition fees, library fines, residence fees, or loans on theiriTJ-czw[libra)7.8(r)-o8n9aJ15.0889 0 TDpmo0 r.1(s)an case may include: im4u

5.2 Academic Advisers

Before registration, all students entering the Faculty must consult with the Academic Adviser of their program for selection and scheduling of required, complementary, and elective courses.

The Academic Adviser will normally continue to act in this capacity during the whole of the student's studies in the Faculty.

5.3 Minimum Credit Requirement

Each student's minimum credit requirement for the degree is determined at the time of acceptance and is specified in the letter of admission or its attached documentation.

Normally, Quebec students who have completed the Diplôme d'études collégiales (DEC) or equivalent diploma are admitted to to the first year of a program requiring the completion of a minimum of 90 credits – 102 credits for Agricultural Science Major Internship Options, 109 credits for Agricultural Engineering, and 115 credits for Dietetics.

Students from outside Quebec who are admitted on the basis of a high school diploma enter a program that is extended by one year to include the 30 credits of Freshman Major, see section 5.1. Advanced standing of up to 30 credits may be granted to students who obtain satisfactory results in International Baccalaureate, French Baccalaureate, Advanced Placement Tests or Advanced Level Examinations under certain conditions; refer to section 3 "Application and Admission Requirements".

5.4 Categories of Students

Full-Time Students

Full-time students in satisfactory standing take a minimum of 12 credits per term.

Full-time students in probationary standing are not normally permitted to take more than 14 credits per term. In exceptional circumstances the Committee on Academic Standing may give permission to attempt more.

Part-time students

Part-time students carry fewer than 12 credits per term. New students apply through the Student Affairs Office of the Faculty and the applicant must have the qualifications to enter a full-time program.

5.5 Academic Standing

All students are required to give satisfactory evidence of mastery of the material of lectures and laboratories. Examinations are normally held at the end of each course but other methods of evaluation may also be used. The grade assigned for a course represents the standing of the student in all the work of the course.

5.6 Examinations

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tionary standing. Failure to meet at least one of these conditions will result in requirement for permanent withdrawal.

5.10 Course Change Information

1. Courses: please refer to "Course Change Period" on page 28

would be of particular interest include: Biotechnology, Computer Science, Construction Engineering and Management, and Environmental Engineering. Details of these Minors can be found in the Faculty of Engineering "Minor Programs and Choice of Electives or Complementary Courses" on page 185. In order to complete a Minor, students will need to spend at least one extra term beyond the requirements of the B.Sc.(Agr.Eng.) program. All required courses must be passed with a minimum grade of C.

Required Courses: 85 credits.
Complementary Courses: 24 credits.

ENVIRONMENTAL ENGINEERING MINOR

The Minor program consists of 27 credits in courses environment related. By a judicious choice of complementary and elective courses, Agricultural and Biosystems Engineering students may obtain this Minor with a minimum of 12 additional credits. The Environmental Engineering Minor, see page 188, is administered by the Faculty of Engineering, Department of Civil Engineering and Applied Mechanics.

Courses available in the Faculty of Agricultural and Environmental Sciences: (partial listing)

MINOR IN AGRICULTURAL ENGINEERING

Academic Adviser: Professor R.B. Bonnell

Engineering systems are now being emphasized in animal and crop production, management and utilization of waste products, production of value-added materials and by-products, protection of natural resources, conservation and management of ecosystems, soil and water decontamination, and the development of new food, fibre and pharmaceutical products. Computer-based systems play a major role in the management of information, and process control in many of the above technologies.

A non-professional Minor in Agricultural Engineering, consisting of 24 credits of Agricultural and Biosystems Engineering courses is available for students registered in the B.Sc.(Agr.Env.Sc.) and B.Sc.(F.Sc.) programs. A total of 18 credits of required Agricultural and Biosystems Engineering courses will demonstrate basic engineering applications. Selection of AaK ecsis

AGRICULTURAL SYSTEMS OPTION

The smooth functioning of the agriculture and food system requires good market analysis and appropriate policy and program

Required Courses: 34 credits

Complementary Courses: 24 credits, minimum

Electives: selected in consultation with Academic Adviser, to meet the minimum 90-credit requirement for the degree.

Medicine: Louis Beaumier, Franco Carli, Katherine Cianflone, Réjeanne Gougeon, L. John Hoffer, Errol Marliss,

Jean-François Yale Parasitology: Marilyn E. Scott Psychiatry: Simon Young

Health and well-being of individuals in relation to food choices and physiological status prevails as the unifying theme of the programs in the School of Dietetics and Human Nutrition. The availability of food, normal metabolism and clinical nutrition, community nutrition

6.4 School of Dietetics and Human Nutrition

Macdonald Stewart Building - Room MS2-039

Telephone: (514) 398-7842

E-mail: dietstage@macdonald.mcgill.ca Website: www.mcgill.ca/dietetics

Director — Katherine Gray-Donald

Emeritus Professor — Helen R. Neilson

Professors — Timothy A. Johns, Peter J.H. Jones, Harriet V. Kuhnlein

Associate Professors — Laurie Chan (NSERC Northern Research Chair), Grace Egeland (Canada Research Chair), Katherine Gray-Donald, Kristine G. Koski, Stan Kubow, Louise Thibault, Linda Wykes (William Dawson Scholar)

Lecturers — Lynda Fraser (PT), Linda Jacobs Starkey, Maureen Rose-Lucas, Joane Routhier, Sandy Phillips, Hugues Plourde, Heidi Ritter, Donna Schafer

Adjunct Professors — Kevin A. Cockell, Jeffrey S. Cohn, Marie L'Abbeé

Cross-Appointed Staff —

Food Science and Agricultural Chemistry: Selim Kermasha

The following courses must be taken by students who wish to meet the course requirements for admission to the Ordre des chimistes du Québec.

6.6 Interdisciplinary Studies

Ecological Agriculture Program Telephone: (514) 398-7928

Website: www.agrenv.mcgill.ca/agrecon/ecoagr

MINOR IN ECOLOGICAL AGRICULTURE

Academic Adviser: Professor J. Henning

This Minor program is designed to focus on the principles underlying the practice of ecological agriculture and is suitable for stu-

farms or other enterprises that are either organic, biodynamic, or practicing permaculture. The placement must be approved by the academic adviser for the Certificate/Minor.

4. NRSC 521 is an alternate year course.

AGRICULTURAL SCIENCES MAJORS

Academic Adviser: Katherine McClintock

Department of Plant Science Telephone: (514) 398-0869 ext. 7872

Telephone. (514) 396-0669 ext. 7672

The Agricultural Sciences Majors are designed to provide students with a broad appreciation of the scientific and applied aspects of modern agriculture and the flexibility to pursue individual interests. Students can choose to keep their summers free in the Agricul-

AGRICULTURAL SCIENCES INTERNSHIP MAJOR – ECOLOGICAL AGRICULTURE OPTION (102 credits)

Required Courses: 73 credits.
Complementary Courses: 13 credits.

AGRICULTURAL SCIENCES INTERNSHIP MAJOR – SOIL SCIENCE OPTION (102 credits

Required Courses: 64 credits.

Complementary Courses: 25 credits.

Electives: selected in consultation with Academic Adviser, to meet the minimum 102-credit requirement for the degree.

6.7 Department of Natural Resource Sciences

Macdonald Stewart Building - Room MS3-040

Telephone: (514) 398-7890 Fax: (514) 398-7990 E-mail: info@nrs.mcgill.ca Website: www.nrs.mcgill.ca

Chair — Benoît Côté

Emeritus Professors — A. Clark Blackwood, Roger Knowles, Angus F. Mackenzie, Robert A. MacLeod, Peter H. Schuepp, Robin K. Stewart

Professors — David M. Bird, Peter Brown (joint appoint. with Geography and McGill School of Environment), James W. Fyles (Tomlinson-Fowler Professor of Forest Ecology), William H. Hendershot

Associate Professors — Benoît Côté, Mark A. Curtis, Brian T. Driscoll, Gary B. Dunphy, David J. Lewis, Guy R. Mehuys, Donald F. Niven, Manfred E. Rau, Rodger D. Titman, Terry A. Wheeler, Lyle Whyte

Assistant Professors —

6.8 Department of Plant Science

Raymond Building - Room R2-019

Note: Other courses on the Downtown Campus may be equivalent to some required courses; consult the Academic Adviser. Course substitutions must be approved by the Committee on Academic Standing.

WILDLIFE BIOLOGY MAJOR

[Program revisions are under consideration for September 2003. Go to www.mcgill.ca (Course Calendars) in July for details.]

Academic Advisers: Professors M. Curtis (U1), D. Bird (U2), R. Titman(U3)

This program emphasizes understanding the ecology of vertebrate animals, their biological and physical environment and the interactions that are important in the management of ecological communities and wildlife species. Employment opportunities exist in resource planning, nature interpretation, wildlife management and environmental impact assessment. By careful course selection students may may meet requirements for certification by the Wildlife Society.

Required Courses: 37 credits.

Complementary Courses: 27 credits.

Electives: to meet the requirement of 90 credits for the degree.

¹ Downtown Campus

BOTANICAL SCIENCE MAJOR

Academic Adviser: Professor D.J. Donnelly

e-mail: donnelly@nrs.mcgill.ca

The Botanical Science Major offers two options for those interested in working with plants, one emphasizing the ecology of plants and their environment and the other emphasizing the physiology and molecular biology of plants. The Ecology Option emphasizes ecology, conservation, and environmental sciences. The Molecular Option emphasizes molecular genetics, plant improvement, and biotechnology. These two options form botanists prepared for exciting careers in the knowledge economy.

Graduates find employment within private industries, government services, consulting, teaching, or go on to do postgraduate research.

These programs can be completed entirely on the Macdonald Campus or one term can be spent taking courses on the Downtown Campus during the final year.

Required Courses: 42 credits.

Complementary Courses: 18 credits, selected from an approved list in consultation with the Academic Adviser; taken in either the

MINOR IN AGRICULTURAL PRODUCTION

Academic Adviser: Professor K. A. Stewart

e-mail: stewartk@macdonald.mcgill.ca

This Minor program is designed to allow students in non-agricultural production Majors to receive credit for courses in agricultural production and to stimulate "cross over" studies. The Minor can be associated with existing Major programs in the Faculty, but in some instances it may require more than 90 credits to meet the requirements of both the Major and the Minor.

Students are advised to consult their Major Program adviser and the Academic Adviser of the Minor in their first year. At the time of registration for their penultimate year, students must declare their intent to obtain a Minor in Agricultural Production. With the agreement of their Major Program adviser they must submit their program of courses already taken, and to be taken in their final year, to the Academic Adviser of the Agricultural Production Minor. The Academic Adviser of the Agricultural Production Minor will then certify which courses the student will apply toward the Minor and that the student's program conforms with the requirements of the Minor.

General Regulations

To obtain a Minor in Agricultural Production, students must:

- a) ensure that their academic record at the University includes a C grade or higher in the courses as specified in the course requirements given below.
- b) offer a minimum total of 24 credits from the courses as given below, of which not more than 6 credits may be counted for both the Major and the Minor programs. This rewith existl ms. This A-7.4(nses)(28or prog6prog6prog6prog6prUre)7.hSprion as (as givea Ma)7.7(jos-0

The educational goals of the program are:

- to make graduates competent in the exercise of their profession:
- 2. to help the student's integration into professional life;
- 3. to foster professional mobility;
- 4. to foster a need for continual development of professional knowledge.

Six academic terms are spent on the Macdonald Campus studying a sequence of courses in soil, plant science, animal science, engineering, economics and management. The first summer of the program is spent on a farm other than the home farm where the student learns the many skills and encounters the many problems related to modern commercial agriculture. Students will prepare for this 13-week practicum through a one-week internship during both academic semesters of Year 1.

During the second summer, students will be encouraged to acquire additional farm experience away from the home farm. This could be a farm enterprise or another field of activities in the agrifood sector. Students could also choose to spend their second summer on their home farm, where they would be responsible for data collection to be used in their Farm Project and the Agro-Environmental Fertilization Plan. The internships and practicums will enable the students to relate their academic work to the reality of farming.

Finally, courses in English, Fr

9 Instructional Staff

- Alli, Inteaz; B.Sc.(Guyana), M.Sc., Ph.D.(McG.); Professor of Food Science and Agricultural Chemistry
- Baker, Laurence; B.B., M.Sc.(Man.), Ph.D.(McG.); Associate Professor of Agricultural Economics
- Barrington, Suzelle; B.Sc.(Agr.Eng.), Ph.D.(McG.); Professor of Agricultural and Biosystems Engineering
- Bede, Jacqueline; B.Sc.(Calg.), M.Sc., Ph.D.(Tor.); Assistant Professor of Plant Science
- Beech, Robin N.; B.Sc.(Nottingham), Ph.D.(Edinburgh); Associate Professor of Parasitology
- Begg, Caroline; B.Sc.(Agr.)(McG.), M.Sc.(Sask.), Ph.D.(McG.); Faculty Lecturer, Department of Plant Science
- Berteaux, Dominique; B.Sc.(Rennes), M.Sc.(Tours),
- Ph.D.(Sherbrooke); Adjunct Professor of Wildlife Biology
- Bird, David M.; B.Sc. (Guelph), M.Sc., Ph.D. (McG.); Fellow A.O.U.; Professor of Wildlife Biology and Director, Avian Science and Conservation Centre
- Blackwood, A. Clark; B.Sc., M.Sc.(Alta.), Ph.D.(Wis.), F.R.S.C.; Emeritus Professor of Microbiology
- Bonnell, Robert B.; B.Sc.(C'dia), B.Sc.(Agr.Eng.), M.Sc., Ph.D.(McG.); Associate Professor of Agricultural and Biosystems Engineering (*Brace Associate Professor*)
- Bordignon, Vilceu; Ag.Tec.(EAPC), D.V.M., M.Sc., Ph.D.; Assistant Professor of Animal Science
- Broughton, Robert S.; B.S.A., B.A.Sc.(Tor.), S.M.(M.I.T.), Ph.D.(McG.), L.L.D.(Dal.); F.A.S.A.E., F.C.S.A.E.; Emeritus Professor of Agricultural and Biosystems Engineering
- Brown, Peter G.; B.A.(Haverford), M.A., Ph.D.

- Madramootoo, Chandra; B.Sc.(Agr.Eng.), M.Sc., Ph.D.(McG.); Professor of Agricultural and Biosystems Engineering and Director, Brace Centre for Water Resources Management (James McGill Professor)
- Marcil, Paul; B.A.(Bishop's), B.F.A.(Conc.), B.C.L., L.L.B.(McG.); Faculty Lecturer (PT), Department of Natural Resource Sciences
- Marshall, William D.; B.Sc.(U.N.B.), Ph.D.(McM.); Professor of Agricultural Chemistry
- Mather, Diane E.; B.Sc.(Agr.)(McG.), M.Sc., Ph.D.(Guelph); Associate Dean (Research) and Professor of Plant Science McClintock, Katherine; B.A.(Wellesley), B.Sc.(Agr.)(McG.); Fculty Lecturer, Department of Plant Science

Zadworny, David; B.Sc., Ph.D.(Guelph); Associate Professor of Animal Science Zhao, Xin; B.Sc., M.Sc.(Nanjing), Ph.D.(C'nell); Associate Professor of Animal Science (William Dawson Scholar)