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1 The School

1.1 Location

School of Dietetics and Human Nutrition
Room MS2-039
Macdonald Stewart Building
Macdonald Campus
21,111 Lakeshore Road
Ste-Anne-de-Bellevue, QC H9X 3V9
Canada

Telephone: (514) 398-7842
Email: dietstage@agradm.lan.mcgill.ca
Website: http://dietetic.mcgill.ca

1.2 Administrative Officers

DEBORAH J.I. BUSZARD, B.Sc.(Bath), Ph.D.(Lond.) **Dean, Faculty of Agricultural & Environmental Sciences and Associate Vice-Principal (Macdonald Campus)**

WILLIAM H. HENDERSHOT, B.Sc.(Tor.), M.Sc.(McG.), Ph.D.(U.B.C.) **Associate Dean (Academic)**

ERIC R. NORRIS, B.S.A.(Tor.), M.Sc.(Guelph), Ph.D.(Mich. St.) **Associate Dean (Student Affairs)**

MARCEL J. COUTURE, B.Sc.(Agr.)(McG.), M.Sc.(Guelph) **Associate Dean (Community Relations)**

DIANE E. MATHER, B.Sc.(Agr.)(McG.), M.Sc., Ph.D.(Guelph) **Associate Dean (Research)**

KATHERINE GRAY-DONALD, B.Sc., Ph.D.(McG. **Director, School of Dietetics and Human Nutrition**

1.3 Academic Staff

Emeritus Professor
Helen R. Neilson; M.B.E., B.H.S., M.Sc.(McG.), P.Dt.

Professor
Peter J.H. Jones; B.Sc., M.Sc.(U.B.C.), Ph.D.(Tor.)
Harriet V. Kuhnlein; B.S.(Penn. St.), M.S.(Oregon), Ph.D.(Calif.Berkeley)

Associate Professors
Laurie H.M. Chan; B.Sc., M.Phil.(Hong Kong), Ph.D.(London)
Katherine Gray-Donald; B.Sc., Ph.D.(McG.
Timothy A. Johns; B.Sc.(McM.), M.Sc.(U.B.C.), Ph.D.(Mich.)
Kristine G. Koski; B.S., M.S.(Wash) Ph.D.(Calif.,Davis)
Stan Kubow; B.Sc.(McG.), M.Sc.(Tor.), Ph.D.(Guelph)
Louise Thibault; B.Sc., M.Sc., Ph.D.(Laval)

Assistant Professors
David Bissonette; B.Sc.(F..Sc.)(McG.), Ph.D.(Tor.)
Linda Wykes; B.Sc., M.Sc., Ph.D.(Toronto)

Lecturers
Lynda Fraser; B.A., M.Ed.(Dal.) (part-time)
Linda Jacobs Starkey; B.Sc.(H.Ec.)(Mt.St.Vin.), M.Sc., (Ph.D.)(McG.),FDC
Maureen Lucas; B.Sc.(F.Sc.), M.Ed.(McG.)
Joane Mayrand Routhier; B.Sc.(F.Sc.)(McG.)
Sandra Phillips-Hutchins; B.Sc.(F.Sc.)(McG.), B.A.(Queen's)
Hugues Plourde; B.Sc.(Nutr.Sc.)(McG.), M.Sc.(Nutri.)(Mtrl.)
Heidi Ritter; B.Sc.(Nutr.Sc.), M.Sc.(McG.)
Donna Schafer; B.Sc., M.Sc.(Nutr.Sc.)(McG.)
R. Stojak; B.A.(Winn.), M.A., Ph.D.(Manit.) (part-time)

Cross-Appointed Staff
Louis Beaumier; M.D., FRCPC *(Medicine)*
Franco Carli; M.D., FRCA *(Medicine)*
Katherine Cianflone; Ph.D. *(Medicine)*
Rejeanne Gougeon; Ph.D. *(Medicine)*
L. John Hoffer; Ph.D. *(Medicine)*
Selim Kermasha; Ph.D. *(Food Science)*
Errol Marliss; M.D. *(Medicine)*
Marilyn Scott; Ph.D. *(Parasitology)*
Jean-François Yale; M.D. *(Medicine)*
Simon N. Young; Ph.D. *(Medicine)*

Adjunct Professors
Kevin A. Cockell; Ph.D.
Jeffrey S. Cohn; Ph.D.
Shi-Hsiang Shen; Ph.D.

1.4 General Information

The School of Dietetics and Human Nutrition is part of the Faculty of Agricultural and Environmental Sciences which is located on the Macdonald Campus of McGill University. The Macdonald Campus is in Ste-Anne-de-Bellevue at the western end of the island of Montreal, 32 kilometres west of the city of Montreal and can be reached by city bus and train service.

The School offers a B.Sc.(Nutr.Sc.) through programs in dietetics and nutrition. Professional Practice experiences in the dietetics major are provided in the McGill teaching hospitals and in a wide variety of health, education, business, government and community agencies. The dietetics major leads to membership in professional dietetics associations and eligiblity for professional registration.

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 at the local and international level, the evaluation of nutritional products and their use in nutrition, and the communication of information about food and health form the core of academic programs.

Laboratory and lecture rooms are well supplied with modern and efficient teaching facilities, while the reference section of the Macdonald Campus Library and the research laboratories are equipped to permit the vigorous investigation of problems at both the undergraduate and postgraduate level.

2 Programs and Admission Information

2.1 Degrees Offered

Bachelor of Science in Nutritional Sciences – B.Sc.(Nutr.Sc.)
Two undergraduate degree programs are offered by the School. The Dietetics major leads to professional qualification.
The Nutrition major offers three study options: Nutritional Biochemistry, Nutrition and Populations, or Nutrition of Food.

M.Sc. and Ph.D.
Graduate study is also offered at both the Master's and Doctoral levels. For further information, contact the School or refer to the Faculty of Graduate Studies and Research Calendar.

2.2 Application

The academic year at McGill is made up of two sessions, the fall/winter or regular session, and the summer session. These are subdivided into the fall semester (September to December), the winter semester (January to April) and the four months of the summer session (May, June, July, and August). While most students enter in September, it is possible to be considered for admission to most of the Agricultural and Environmental Studies undergraduate programs in January.

The deadlines for submission of applications are: January 15 (applicants studying outside of Canada), February 1 (applicants from Canadian high schools outside of Quebec), March 1 (all other applicants). All applications must be accompanied by a non-refundable fee, in Canadian or U.S. funds only, payable by certified cheque, money order or credit card – American Express, Mastercard, or Visa.) The fee is $50 for an electronic application; $60 for a paper application. McGill does not offer application fee waivers.

Application to the School of Dietetics and Human Nutrition can be made using the McGill electronic application available on the Web (http://www.aro.mcgill.ca). A printed application kit can also be ordered from that site. Those without access to the Web may obtain the application kit, by emailing, writing, or telephoning the Student Affairs Office, Macdonald Campus, 21,111 Lakeshore Road, Ste-Anne-de-Bellevue, QC, H9X 3V9. Telephone: (514) 398-7928. Email: studentinfo@macdonald. mcgill.ca.

The same Application Form is used to request admission to Agricultural and Environmental Sciences, Arts, Education, Engineering, Management, Nursing, Physical and Occupational Therapy, and Science. A second choice of program may be entered on the form.

2.3 Admission Requirements

Applicants whose mother tongue is not English, and who have not completed both a high school and a CEGEP program in the province of Quebec or studied for five or more years in an institution where English is the primary language of instruction, must submit acceptable evidence of facility in English before their application for admission can be considered. See page 8.

Quebec CEGEP Students

Applicants must have completed a two-year Quebec post-secondary collegial program (CEGEP) in the Pure and Applied Sciences or the Health Sciences or its equivalent. (Applicants who have completed the DEC en sciences, lettres et arts are also eligible for admission. Applicants who have completed a DEC in a technical area will be considered on an individual basis.)

Admission is currently based on overall average and marks in prerequisite courses. (Discussions are underway regarding future use of the côte de rendement au collégial *(côte r);* both the overall *côte r* and the *côte r* in prerequisite courses.)

The current CEGEP profile for the B.Sc.(Nutr.Sc.) is Math 103, 203 (201-NYA-05, 201-NYB-05); Phys. 101, 201, 301 (203-NYA-05, 203-NYB-05, 203-NYC-05); Chem. 101, 201, (202-NYA-05, 202-NYB-05), 202; Biol. 301 (101-NYA-05), 401. The new CEGEP course numbers follow the old numbers in brackets. Note, that there are no longer common course codes for Biology 401 and Chemistry 202; the equivalent material is given under different numbers at each CEGEP.

Based upon entry with the appropriate DEC, the B.Sc.(Nutr.Sc.) is offered as a 90-credit, three-year program for Nutrition and a 115-credit, three and one-half year program for Dietetics.

Applicants from Other Canadian Provinces
Applicants from provinces other than Quebec and Ontario must hold a Grade 12 diploma and have completed a pre-calculus course in functions plus at least two of biology, chemistry, and physics at the Grade 12 level.

Applicants from Ontario must have completed the OSSD and have completed six appropriate OACs including a pre-calculus course in functions plus at least two of biology, chemistry, and physics.

Students who are accepted on the basis of a high school diploma enter a program which is extended by one year to include the 30 credits which comprise the Freshman Year.

Applicants from the United States
Applicants who are applying on the basis of a high school diploma from a school in the United States must have completed a pre-calculus course in functions, and at least two of biology, chemistry, and physics. Applicants must write College Entrance Examination Board tests including the SAT I and three appropriate SAT IIs. ACTs are also acceptable. SAT IIs must include mathematics and at least one science.

Applicants who have completed Advanced Placement Examinations in appropriate subjects with a grade of "3" or better will be granted some advanced standing, up to a maximum of 30 credits.

Students who are accepted on the basis of a high school diploma enter a program which is extended by one year to include the 30 credits which comprise the Freshman Year.

Applicants from Other Countries
The normal basis for review of a file is completion of the credentials which lead to university admission in the applicant's country of study.

Students from the United Kingdom and Commonwealth countries may be admitted if they have completed Advanced Level examinations in chemistry, physics, and mathematics with a grade of "C" or better in each, and five appropriate G.C.S.E. subjects at the Ordinary Level, including biology and English.

Advanced Level examination results which are appropriate to the intended program of studies will be assessed for advanced standing and credit when the results are received directly from the appropriate Examination Board. A maximum of 30 credits is granted for Advanced Level papers and a maximum of 10 credits for papers in Mathematics. Credit is normally granted only for grades of "C" or better.

Students who have a very good academic record in Lower Form VI and excellent results in at least five G.C.S.E. subjects at the Ordinary Level may be considered for admission to a program requiring the completion of a minimum of 120 credits.

For students applying on the basis of the French Baccalaureate, the minimum requirement is the Diploma in Series S in the "Première Group" with "Mention passable".

Applicants with the International Baccalaureate
Applicants should have completed Higher or Subsidiary Level mathematics and normally two of biology, chemistry, or physics. Ten advanced standing credits may be granted for mathematics and science Higher Level subjects completed within the IB Diploma, up to the maximum of 30 credits, while 6 credits will be given for non-science Higher Level examinations taken as part of the Diploma or for Higher Level Certificate subjects.

Transfer Students
Students wishing to transfer from other universities and colleges are considered for admission on the basis of both their university work and previous studies. A minimum of 60 credits of work must be completed at McGill if a degree is to be granted. Students must also fulfil the requirements of a degree program. Credits are determined only once a formal application and all the necessary supporting documents are received.

Basic science requirements are: two semesters of biology; two semesters of general chemistry, with labs; one semester of organic chemistry; two semesters of physics (including mechanics, electricity and magnetism, and waves and optics), with labs, and one semester in each of differential and integral calculus. A grade of B or better is expected in prerequisite mathematics and science courses.

This same policy is applicable to holders of undergraduate degrees.

Transfer Students – Inter-Faculty
Students wishing to transfer from one faculty to another must complete an inter-faculty transfer form. The deadline for submitting a transfer form for admission to the School is June 1 for admission in September and November 1 for admission in January.

Mature Student Admission
Residents of Canada who will be 23 years of age or older by September 1 (for admission for the fall session) or January 1 (for admission for the winter session) and who lack the academic background normally required for admission may apply for entrance as mature students. Individuals interested in being considered for entrance under this policy should contact the Student Affairs Office for complete details.

3 Student Services

The information provided below is specific to Macdonald Campus. Students are also advised to consult the General University Information Section.

The Student Service Centre is currently located in Rowles House, telephone (514) 398-7992. (Note: Student Services will be moving to the Centennial Centre in the summer of 2000.) Available at that location are offices of the Counselling Services, Health Services, Off-Campus Housing, Student Aid, and Career and Placement Services.

Counselling Services – A professional counsellor is available on campus twice a week offering counselling for personal, social and emotional concerns as well as for academic and vocational concerns. Appointments are required.

Health Service – McGill has two student health clinics, one on the Macdonald Campus and the other on the Downtown Campus. A referral service on the Macdonald Campus is available Monday through Friday. A nurse/health educator is on Campus twice a week and a physician may be seen by appointment on specified dates. All information is confidential and does not form any part of the student's University record. Students who wish to be followed by Student Health Service for particular health needs, should have their physician forward relevant information to Health Service.

Students in the Dietetics Major are encouraged to complete the Compulsory Immunization Program for Health Care students prior to registration. Participation in Professional Practices (Stages) in Dietetics will only be permitted for those students who have completed all immunization requirements.

Off-Campus Housing – The Macdonald Campus service is available from June 1 to August 31 each year.

Student Aid Office – Information about government loans, McGill loans and bursaries, and the Work Study Program can be obtained from the Coordinator at the Student Service Centre. During the academic year (September to April) a counsellor visits the campus twice monthly to help students with financial problems.

Career and Placement Service (CAPS) – Student Services, in cooperation with the Faculty, provides a Career and Placement Service on Campus to bring together potential employers and students seeking permanent, summer and part-time career-related work. CAPS also provides job search assistance individually and in groups, assists with Career Day and is aiming to enhance co-op opportunities for students. Services are available to currently registered students and those who have been away from the Campus for less than one year.

Athletics – Facilities available to Macdonald students are a gymnasium, pool, weight room, an indoor arena, tennis courts, lit playing fields and large expanses of green space.

The athletics program is designed to help students relax in their spare time. It also allows the students to learn, practise or use a skill which they have developed during one of the many programs offered. Four types of programs are offered: instructional, recreational, intramural and intercollegiate. There are over 60 programs in all. A handbook, with complete information on all programs, is available at the Athletics Office in the Stewart Athletic Complex west of the Centennial Centre, telephone (514) 398-7789. Information is also available on the Web at http://www.agrenv.mcgill.ca/society/athletic.

Macdonald Campus Residence
Laird Hall, with a capacity of more than 210 students, is arranged on a co-educational basis and provides accommodation for both undergraduate and graduate students. Residents enjoy comfortable rooms, modern kitchens, cosy lounge facilities, and other amenities which help make their residence life a complete and meaningful part of their university experience.

The new EcoResidence, Canada's first ecologically-friendly student residence, accommodates 100 students. The EcoResidence is a unique initiative that recycled two buildings and incorporated the newest ecological construction technology. This type of accommodation will appeal to students who enjoy independent living in self-contained apartments of two or six single bedroom units. Each unit is built on a split-level concept with large, airy common living areas and fully equipped kitchens.

Applications for residence and inquiries concerning the residence should be addressed to the Campus Housing Office, P.O. Box 192, Macdonald Campus of McGill University, Ste-Anne-de-Bellevue, QC, H9X 3V9. Telephone: (514) 398-7716, email: Residence@Macdonald.McGill.ca.

The residence fees for the 2000-01 session had not been set at the time this Calendar went to print. The 1999-2000 session rates for Laird Hall were (Double occupancy) $1,872 and (Single occupancy) $2,088. Rates for the EcoResidence are available upon request. An updated fee sheet will be available with the residence application forms when an offer of accommodation is made.

The Macdonald Campus Residence operation does not offer a Board Plan. Meals are on a cash basis and may be obtained from the Snack Bar facility of the Centennial Centre. The Snack Bar is open for breakfast and lunch only, 5 days per week, exclusive of Saturday, Sunday and holidays designated by the University. Students may buy individual meals on a cafeteria basis.

For budgeting purposes, the approximate cost of meals per person per session might be considered to be $3,000.

The Application for Admission package contains a form for applying for residence accommodation. Applications for residence and inquiries concerning the residence should be addressed to the Campus Housing Office by email: Residence@Macdonald.McGill.ca; telephone: 514-398-7716; or fax: 514-398-7953.

Student Parking
Students who hold parking permits will be allowed to park on Campus provided they observe the parking regulations and other applicable rules.

Extracurricular Activities
All undergraduate, postgraduate, and Farm Management and Technology students are members of the Macdonald Campus Students' Society. 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. All B.Sc.(Nutr.Sc.) students are also members of the Dietetics and Human Nutrition Undergraduate Society (DHNUS). Students in the Dietetics Major may become student members of the professional association. Student life is informal and friendly and student groups range from the Outdoor Adventure Club to the Photography Society.

The Centennial Centre is the students' building and the centre of student life, offering facilities for student activities.

4 Academic Information and Regulations

Students in the B.Sc.(Nutr.Sc.) program are governed by the rules and regulations of the Faculty of Agricultural and Environmental Sciences, excerpts of which are given below. Additional information regarding the credit and grading system, examination regulations, withdrawal policies, etc. is contained in the Faculty and General University Information sections of the Undergraduate Programs Calendar which is sent to accepted applicants with their offer of admission.

4.1 Academic Credit Transfer

Transfer of credits (maximum of 30) based on courses taken at other institutions before entrance to this Faculty is made by the Admissions Committee prior to entrance.

Transfer of credits may be made for work at other educational institutions during a student's attendance at McGill University. Permission to apply such credits to a McGill program must be secured by the student from the Academic Adviser of their program before the work is undertaken. Forms are available in the Student Affairs Office (Macdonald Campus). Grades obtained in such courses do not enter into calculations of grade point averages (GPA) in this Faculty.

Exemption from a Required or Complementary course on the basis of work completed at another institution must be approved by both the Academic Adviser and the instructor of the appropriate McGill course.

Full-time students may, with the written permission of the Associate Dean (Student Affairs) of the Faculty, register for 3 credits, or exceptionally 6 credits, in each semester at any university in the province of Quebec. These courses successfully completed with a minimum grade of C (according to the standards of the university giving the course), will be recognized for the purpose of the degree but the grades obtained will not enter into calculations of GPA in this Faculty.

4.2 Standing

The program for the degree with a Major in Nutrition will normally be completed in three academic years or six semesters (following the Freshman Year, if one is required). The degree with a Major in Dietetics will normally be completed in three and one-half academic years or seven semesters. For the purpose of student classification, the years will be termed U1, U2 and U3.

U1 to be used during the first 12 months following each admission to a degree program in which the student is required to complete 72 or more credits at the time of admission.

U2 to be used for all students who are not U1 or U3.

U3 to be used during the session in which it is expected the student will qualify to graduate.

Academic Advisers

Before registration, all students must select a Major program of study. They must consult with the Academic Adviser of their chosen program for the selection and timetabling of Required, Complementary, and Elective courses. The Academic Adviser will continue to act in this capacity during the whole of the student's studies in the Faculty.

4.3 Degree Requirements

To be eligible for a degree, students must have passed all required and complementary courses and also any specified electives recommended by their adviser. They must have accumulated at least 90 credits for the Nutrition Major and at least 115 credits for the Dietetics Major including four levels of professional formation. At least 60 credits must be taken at McGill. A CGPA of at least 2.00 is required for graduation.

5 Academic Programs

5.1 Freshman Entry Program

Students entering the four year (or longer) programs take the following courses and at least 5 credits of electives in their first year at McGill.

Required Courses (25 credits)

333-110A	(4)	Inorganic Chemistry
338-112A	(4)	Introductory Physics I
344-120A	(3)	General Biology
360-101A	(3)	Calculus I
333-230B	(4)	Organic Chemistry
338-114B	(4)	Introductory Physics II
360-102B	(3)	Calculus II

5.2 Major in Dietetics

Academic Advising Coordinator: Linda Jacobs Starkey

Graduates are qualified for challenging professional and leadership positions related to food and health, as dietitians, nutritionists and food administrators. The designations "Dietitian" and "Nutritionist" are reserved titles in the province of Quebec. As clinical nutritionists, dietitians may work in health and food service centres and hospitals, nutrition counselling centres, clinics and private practice. As community nutritionists, dietitians are involved in nutrition education programs through schools, sports centres and local and international health agencies. The dietitian in the food service sector participates in all aspects of management to assure quality food products. Postgraduate programs are available to qualified graduates.

The duration of the program is three and one-half years. Successful graduates are qualified for membership in Dietitians of Canada and the Ordre professionnelle de diététistes du Québec. Forty weeks supervised professional experience in clinical and community nutrition and food service systems management are included.

A compulsory immunization program exists at McGill which is required by the teaching hospitals before they will permit Dietetics students to practice. Students should complete their immunization before arriving at Macdonald. Medical/health documentation must be received prior to commencement of each level of Stage. There are no exceptions possible.

Students are reminded that unethical conduct on Professional Practice (Stage) rotations is considered a serious offence. The Faculty reserves the right to require the withdrawal of any student at any time if it (Faculty) feels the student has displayed unprofessional conduct or demonstrates incompetence.

Required Courses: 103 credits.
(Note: The School firmly applies prerequisite requirements (with C grade as pass) for registration in all required courses in the Nutrition and Dietetics Majors.)
Complementary Courses: 6 credits.
Electives: 6 credits, selected in consultation with an Academic Adviser, to meet the minimum 115-credit requirement for the degree.

All required and complementary courses must be passed with a minimum grade of C.

		CREDITS
Term 1		**17**
333-211A	Biochemistry I	3
333-212A	Biochemistry Laboratory	2
336-251A	Microcomputer Applications	3
382-214A	Food Fundamentals	3
334-242A	Management Theories and Practices	3
One Elective or Complementary		3
Term 2		**19**
342-234B	Biochemistry II	3
362-230B	The Microbial World	3
382-217B	Application of Food Fundamentals	3
382-207A,B	Nutrition and Health	3
382-208J*	Professional Practice (Stage) in Dietetics Level I	4
One Elective or Complementary		3
Term 3		**20**
342-323A	Mammalian Physiology	4
342-330A	Fundamentals of Nutrition	3
360-310A,B	Statistical Methods I	3
382-345D	Food Service Systems Management	5
382-322A	Instructional Communications	2
One Elective or Complementary		3
Term 4		**18**
342-424B	Metabolic Endocrinology	3
334-343B	Accounting and Cost Control	3
382-337B	Nutrition Through Life	3
382-310B*	Professional Practice (Stage) in Dietetics Level II a	1

382-311C*	Professional Practice (Stage) in Dietetics Level II b	5	
382-344B	Clinical Nutrition I	3	
Term 5			**15**
382-436A	Nutritional Assessment	2	
382-445A	Clinical Nutrition II	4	
382-446A	Personnel Management	3	
382-450A	Research Methods in Human Nutrition	3	
One Elective or Complementary		3	
Term 6			**12**
382-403B	Community Nutrition	3	
382-409B*	Professional Practice (Stage) in Dietetics Level III	8	
382-438B	Interviewing and Counselling	1	
Term 7			**14**
382-410A*	Professional Practice (Stage) in Dietetics Level IV	14	

Complementary Courses* (6 credits)

3 credits of Human Behavioural Science courses chosen from:

382-301A (3) Psychology

or equivalent course from another faculty.

3 credits from the social sciences:

170-201A (3) Society and Environment
170-203A,B (3) Knowledge, Ethics and Environment
260-270A (3) Ethics and the Environment
334-200A (3) Principles of Microeconomics
334-230B (3) Economics of Marketing)

* Revisions Awaiting University Approval

Electives (6 credits)

Elective courses should be chosen in consultation with the academic adviser. The following courses most often fit the timetable; elective choice is not limited to these courses.

333-200A (3) Introduction to Food Science
348-330A (3) Academic and Scientific Writing
382-406A (3) Ecology of Human Nutrition
382-420A (3) Food Toxicants and Health Risks
382-430A,B (3) Directed Studies in Dietetics/Nutrition I
382-451A (3) Nutrition Research
382-501A (3) Nutrition in Developing Countries
382-511A (3) Nutrition and Behaviour
382-512A,B (3) Herbs, Foods and Phytochemicals

* Successful completion of all component parts of each level of Professional Practice (Stage) in Dietetics courses is a prerequisite for the next level and must be passed with a minimum grade of C. All required and complementary courses must be passed with a grade of C or better. Undergraduate registration is restricted to students in the Dietetics Major, CGPA greater than or equal to 2.50. Visiting students must contact the Academic Advising Coordinator (Dietetics) regarding course registration eligibility.

5.3 Major in Nutrition

Academic Advising Coordinator: Kristine G. Koski

This Major covers the many aspects of human nutrition and food and gives first, an education in the scientific fundamentals of these disciplines and second, an opportunity to develop specialization in nutritional biochemistry, nutrition and populations or nutrition of food. Graduates normally will continue on to further studies preparing for careers in research, medicine or as specialists in nutrition. Research nutritionists, aside from working as university teachers and researchers, may be employed by government and health protection agencies, in world development programs, or by the food sector.

Required Courses: 52 credits.
(Note: The School firmly applies prerequisite requirements (with C grade as pass) for registration in all required courses in the Nutrition and Dietetics Majors.)
Option Required and Complementary Courses: 12 credits.

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

All required courses must be passed with a minimum grade of C.

			CREDITS
Term 1			**11**
333-211A	Biochemistry I	3	
333-212A	Biochemistry Laboratory	2	
336-251A	Microcomputer Applications	3	
382-214A	Food Fundamentals	3	
Term 2			**12**
342-234B	Biochemistry II	3	
362-230B	The Microbial World	3	
382-207A,B	Nutrition and Health	3	
382-217B	Application of Food Fundamentals	3	
Term 3			**12**
342-323A	Mammalian Physiology	4	
342-330A	Fundamentals of Nutrition	3	
360-310A,B	Statistical Methods I	3	
382-322A	Instructional Communications	2	
Term 4			**9**
342-424B	Metabolic Endocrinology	3	
382-337B	Nutrition Through Life	3	
382-344B	Clinical Nutrition I	3	
Term 5			**8**
382-436A	Nutritional Assessment	2	
382-450A	Research Methods in Human Nutrition	3	
382-451A	Nutrition Research	3	

Additional required and complementary courses, 12 credits. Students must select one of the following three options as part of their program.

			CREDITS
Nutritional Biochemistry Option:			**12**
Term 5	342-552A	Protein Metabolism in Animals	3
Term 6	342-551B	Carbohydrate and Lipid Metabolism	3
Term 3 or 5	338-303A	Advances in Atomic and Nuclear Science	3
	338-405B	Elementary Tracer Techniques	3
Nutrition and Populations Option:			**12**
Term 5	382-406A	Ecology of Human Nutrition	3
Term 6	382-403B	Community Nutrition	3
Select 6 credits from those listed below or any other social science courses:			6
382-301A (3) Psychology			
170-203A,B (3) Knowledge, Ethics and the Environment			
Nutrition of Food Option:			**12**
Term 2 or 4	333-334B	Analytical Chemistry II	3
Term 4	333-251B	Food Chemistry I	3
Term 5	333-300A	Food Analysis I	3
Term 6	333-315B	Food Analysis II	3

Electives: Selected in consultation with the academic adviser to meet the minimum 90 credits for the degree.

5.4 Minor in Human Nutrition

A Minor in Human Nutrition is available for students in other programs within the Faculty of Agricultural and Environmental Sciences, or in other faculties at McGill. It cannot be taken by students in the B.Sc.(Nutr.Sc.) program.

The Minor in Human Nutrition is intended to complement a student's primary field of study by providing a focused introduction to the metabolic aspects of human nutrition.The completion of 24 credits is required, of which at least 18 must not overlap with the primary program. All courses must be taken in the appropriate sequence and passed with a minimum grade of C. Students may declare their intent to follow the Minor program at the beginning of their U2 year. They must then consult with the Academic Advisor

for the Human Nutrition Minor in the School of Dietetics and Human Nutrition to obtain approval for their course selection. Since not all courses are offered every year and many have prerequisites, students are cautioned to plan their program in advance.

The Minor program does not carry professional recognition, therefore, it is not suitable for students wishing to become nutritionists or dietitians. However, successful completion may enable students to qualify for many post-graduate nutrition programs.

Required Courses: 6 credits.
Complementary Courses: 18 or 19 credits

		CREDITS
Required Courses:		**6**
382-337B	Nutrition Through Life	3
382-450A	Research Methods in Human Nutrition	3
Complementary Courses:		**18 or 19**

3 credits in biochemistry, one of:
- 507-311A (3) Metabolic Biochemistry
- 342-234B (3) Biochemistry II

3 or 4 credits in physiology, one of:
- 342-323A (4) Mammalian Physiology
- 552-210B (3) Mammalian Physiology II
- 552-202B (3) Human Physiology: Body Functions

3 credits in nutrition, one of:
- 382-307A* (3) Human Nutrition
- 342-330A (3) Fundamentals of Nutrition

* students in Dietetics or Nutrition Majors may not substitute 382-307 for 343-330

8 or 9 credits from the following list:
- 342-552A (3) Protein Metabolism and Nutrition
- 382-451A (3) Analysis of Nutrition Data
- 382-436A (2) Nutritional Assessment
- 382-551B (3) Carbohydrate and Lipid Metabolism
- 382-420A (3) Food Toxicants and Health Risks
- 382-512A,B (3) Herbs, Foods and Phytochemicals
- 382-501A (3) Nutrition in Developing Countries
- 382-406A (3) Ecology of Human Nutrition
- 382-430A,B or 382-431D,N (3) Directed Studies in Dietetics/Nutrition
- 528-314B or 391-438A (3) Immunology
- 526-300B (3) Human Disease

6 Courses

The course credit weight appears in parentheses (#) after the name.

6.1 Nutrition and Dietetics

✲Successful completion of all components parts of each level of Professional Practice (Stage) in Dietetics is a prerequisite for the next level. All required and complementary courses listed in semesters prior to or with a Stage are prerequisites for that level. Undergraduate registration is restricted to students in the Dietetics Major, CGPA greater than or equal to 2.5. Visiting students must contact the advising Coordinator regarding eligibility for specific courses.

Students are reminded that unethical conduct on Professional Practice (stage) rotations is considered a serious offence. The Faculty reserves the right to require the withdrawal of any student at any time if it (Faculty) feels the student has displayed unprofessional conduct or demonstrates incompetence.

382-200C CONTEMPORARY NUTRITION. (3) (Not open for credit to students with a biology or chemistry course in their program, or to students registered in the School of Dietetics and Human Nutrition, or to students who take 382-207A,B.) Provides students without a biology/chemistry background with the fundamental tools to critically assess nutrition related information, to evaluate their own diets, and to implement healthy changes. Emphasis is on current issues and maximizing health and disease prevention at different stages of the lifecycle. **Professor Wykes**

382-207A,B NUTRITION AND HEALTH. (3) (3 lectures) (Prerequisite: Biology 401 at CEGEP or equivalent.) (Not open to students who take 382-200C or 382-307A/B or who have taken 552-311A or 507-311A.) Provides students who have a basic biology/chemistry background with the fundamental information on how macronutrients, vitamins and minerals are metabolized in the body, followed by application to evaluate current issues of maximizing health and disease prevention at different stages of the lifecycle. **Professors Wykes and Kubow**

✲382-208J PROFESSIONAL PRACTICE (STAGE) IN DIETETICS – LEVEL I. (4) (Six weeks directed experience: 2 weeks equivalent during the winter and 4 weeks in the summer) Two modules, consisting of 3 weeks directed experience each, in the areas of nutrition and food service administration. Clinical experience to be provided on campus and in participating health and food service centres. **Professor Jacobs Starkey**

382-214A FOOD FUNDAMENTALS. (3) (2 lectures and one 4-hour lab) (Prerequisite: 333-230A. Corequisite 333-211A and 333-212A) Study of composition, structure and chemical and physical properties of foods. To understand the scientific principals underlying chemical and physical phenomena that occur during the preparation of food. Laboratory emphasis on developing skills in handling and preparing food, and food assessment by sensory evaluation. **Professor Thibault**

382-217B APPLICATION OF FOOD FUNDAMENTALS. (3) (2 lectures and one 4-hour lab) (Prerequisite: 382-214A) A more intensive study of food and complex food mixtures, including their chemical and physical properties. Learning how to control the changes that take place during the preparation of food to obtain palatable, nutritious and safe food. An introduction to culturally determined food habits. Laboratory emphasis on acquiring new knowledge and application to basic food preparation and cooking principles. **Professor Thibault**

382-301A PSYCHOLOGY. (3) (2 lectures and 1 conference) A study of the general characteristics of physical, social, emotional and intellectual development, the psychology of learning, and the growth and development of personality. **Dr. Stojak**

382-307B HUMAN NUTRITION. (3) (3 lectures and 1 project) (Pre- or co-requisites: 177-201, 180-212) (Not open to students who have taken 382-207A,B.) Cellular and organismal aspects of nutrition with emphasis on biochemical and physiological roles of carbohydrates, lipids, proteins, minerals and vitamins in disease prevention and promotion of optimum health. **Professor Jones**

✲382-310B PROFESSIONAL PRACTICE (STAGE) IN DIETETICS – LEVEL IIA. (1) (One 2-hour conference/week) Human food intake assessment and evaluation will be practiced including modules on dietary interviewing, nutrition education teaching plans and documentation for the medical record. Practical aspects of health and food service administration will be addressed. **Professor Jacobs Starkey**

✲382-311C PROFESSIONAL PRACTICE (STAGE) IN DIETETICS – LEVEL IIB. (5) (7 weeks; summer) Two interrelated modules of directed experience in normal and clinical nutrition and foodservice management, in health care settings and the private sector. **Professor Jacobs Starkey**

382-322A INSTRUCTIONAL COMMUNICATIONS. (2) (2 lectures, 1 lab) (Prerequisite: 382-207A/B) Instructional communication principles and techniques as applied to individuals and groups; from children to seniors and from non-professionals to professionals. Using nutrition principles, effective public speaking; development and use of audiovisual aids, brochures and handouts; writing for the media; non-verbal communication; giving and receiving feedback; group management techniques will be covered. **M. Lucas and Clinical Coordinators**

382-337B NUTRITION THROUGH LIFE. (3) (3 lectures, 1 conference) (Prerequisite 342-330A or 382-307B) Emphasis on applied quan-

titative aspects of human nutrition. Nutrient utilization, evaluation and requirements, as related to dietary standards.
Professor Kubow

382-344B CLINICAL NUTRITION I. (3) (Two 2-hour lectures) (Pre/co-requisite: 342-323A, 382-337B) Clinical nutrition assessment and dietary modification of pathological conditions including hypertension, lipid disorders and cardiovascular disease, obesity, diverticulosis, cancer, COPD, anorexia nervosa and bulimia.
Professor Koski

382-345D FOOD SERVICE SYSTEMS MANAGEMENT. (5) (2-hour lecture and one 3 to 5-hour lab) (Prerequisite: 382-214A, 382-217B) An introductory course applying the principles of organization and management in the direction of a food service department. Emphasis on establishing standards to control and measure performance of the system and evaluate performance against standards. Students learn quantity food production principles and sanitation and safety regulations involved in operation of a food service establishment. **Professor Bissonnette**

382-361B ENVIRONMENTAL TOXICOLOGY. (3) (3 lectures) Basic principles of environmental toxicology. Effects of pollutants including inorganic ions and anions, metals, hydrocarbons, polychlorinated biphenyls and polychlorodibenzo-p-dioxins, insecticides, herbicides, rodenticides, detergents, organometallic compounds, radioactive isotopes and air pollutants on individual organisms, populations, communities and ecosystems. Paradigms for measurement, evaluation and regulation. **Professor Chan**

382-403B COMMUNITY NUTRITION. (3) (3 hour conference) (Prerequisite: 382-337B) A study of the characteristics and prevention aspects of community health problems. Methods of nutritional assessment, dietary surveys and program planning will be examined. Opportunity to plan a nutrition program for a target population will be provided. **Professor Gray-Donald**

382-406A ECOLOGY OF HUMAN NUTRITION. (3) (3 lectures) (Prerequisite: 382-214A) (Not open to students who have taken 382-502A,B.) The scientific basis of contemporary food selection for human nutrition; change in North American food availability and use patterns; sociological, behavioural, and economic influences on food choice; topics on the interaction of environment and food availability, quality and consumption. **Professor Kuhnlein**

✲382-409B PROFESSIONAL PRACTICE (STAGE) IN DIETETICS – LEVEL III. (8) (Ten weeks) Four interrelated modules of directed experience in clinical nutrition, foodservice management, normal nutrition education and community nutrition, in health care settings and the private sector. **Professor Jacobs Starkey**

✲382-410A PROFESSIONAL PRACTICE (STAGE) IN DIETETICS – LEVEL IV. (14) (16 weeks) (Prerequisite 382-409B) Interrelated modules of directed experience in clinical nutrition, foodservice management, normal nutrition education and community nutrition, in health care settings and the private sector.
Professor Jacobs Starkey

382-420A FOOD TOXICANTS AND HEALTH RISKS. (3) (3 lectures) (Prerequisite: 333-211A, 177-201B or 507-212B) The course provides an overview of the basic principles of food toxicology. The occurrence of health effects of the following toxicants will be discussed; food additives and preservatives; natural toxins in plants and marine foods; food borne molds and mycotoxins, heavy metals and pesticides; and products of food processing. Methods for safety evaluation, risk assessment and basis for current Canadian law and regulatory procedures. **Professor Chan**

382-430A,B DIRECTED STUDIES IN DIETETICS/NUTRITION I. (3) An individualized course of study in dietetics/human nutrition under the supervision of a staff member with expertise on a topic not otherwise available in a formal course. A written agreement between student and staff member must be made before registration and filed with the Program Coordinator. **Staff**

382-431D,N DIRECTED STUDIES IN DIETETICS/NUTRITION II. (3) An individualized course of study in dietetics/human nutrition under the supervision of a staff member with expertise on a topic not otherwise available in a formal course. A written agreement between student and staff member must be made before registration and filed with the Program Coordinator. **Staff**

382-432A,B DIRECTED STUDIES IN DIETETICS/NUTRITION III. (3) An individualized course of study in dietetics/human nutrition under the supervision of a staff member with expertise on a topic not otherwise available in a formal course. A written agreement between student and staff member must be made before registration and filed with the Program Coordinator. **Staff**

382-433A,B,C DIRECTED STUDIES IN DIETETICS/NUTRITION IV. (5) (Prerequisite: registration in 382-409B or equivalent; restricted to students in the Dietetics Major or documentation of requirement for professional registration.) An individualized course of study in dietetics and human nutrition not available through other courses in the School. Emphasis will be placed on application of foods and nutrition knowledge, analytic and synthesis skills, and time management. A written agreement between student and instructor must be made before registration. A "C" grade is required to pass the course. Limited enrolment. **Mrs. Jacobs Starkey**

382-436A NUTRITIONAL ASSESSMENT. (2) (2 lectures) (Prerequisite: 382-337B) Review of literature covering current methodology and information related to the assessment of nutritional status in health and disease. Nutritional and clinical implications of nutrient interactions and how they relate to nutritional status.
Professor Bissonette

382-438B INTERVIEWING AND COUNSELLING. (1) (One 2-hour conference) (Prerequisite: 382-344B and 382-311C) Techniques and strategies to increase proficiency in interpersonal skills, specifically "helping skills". To review skills used in professional practice in the dietitian's role as communicator, interviewer, counsellor, educator, motivator and behavioral change specialist.
Professor Jacobs Starkey

382-445A CLINICAL NUTRITION II. (4) (Two 2.5-hour lectures) (Prerequisite: 382-344B and 342-424B) Rationale for clinical nutrition intervention for gastrointestinal and liver disease, hypermetabolic states, diabetes mellitus, renal disease and inborn errors of metabolism. Introduction to enteral/parenteral feedings.
Professor Koski

382-446A PERSONNEL MANAGEMENT. (3) (3 lectures, 1 conference) (Prerequisite: 334-242A) The management of people at work. Employee development and the leadership role. The nature of collective bargaining, the role of unions and management.
Staff

382-450A RESEARCH METHODS IN HUMAN NUTRITION. (3) (2 lectures, 3 hours research, 4 hours other) (Prerequisite: 382-337B, 360-310A/B or 177-373A) Introduction to methods of clinical, community, international, and laboratory-based nutrition research. Lectures, readings and assignments will cover basic research concepts. Students undertake a computer directed literature search and analysis. **Professor Jones**

382-451A NUTRITION RESEARCH. (3) (Prerequisite: 382-337B. Corequisite: 382-450A) An applied course in analysis and interpretation of nutrition data sets. Introduction to specialized dietary and anthropometric computer programs. Written and oral presentation of results. **Professor Chan**

Graduate courses available to undergraduate students at the U3 level, with permission of instructor. Note: not all graduate courses are offered each year.

382-501A NUTRITION IN DEVELOPING COUNTRIES. (3) (2 lectures and one seminar) (Prerequisite: consent of instructor.)

● **382-504A,B SENSORY EVALUATION OF FOOD.** (3) (2 lectures, one 3-hour lab) (Prerequisite: a university-level course in each of food/ food science and statistics.)

382-511B NUTRITION AND BEHAVIOUR. (3) (2 lectures and one seminar) (Prerequisite: 382-445A for undergraduate students or consent of instructor.)

382-512A HERBS, FOODS AND PHYTOCHEMICALS. (3) (3 lectures and a project.) (Prerequisite: 333-211A or 177-201B or 507-212B)

6.2 Courses Offered by Other Units

Given below are descriptions of courses offered by other units within the Faculty which form part of the B.Sc.(Nutr.Sc.) as Required, Complementary or commonly used Elective Courses. For additional courses in Agricultural and Environmental Sciences, please see the Faculty section in the Undergraduate Programs Calendar. McGill University Calendars can be accessed via the Web (http://www.aro.mcgill.ca).

333-200A INTRODUCTION TO FOOD SCIENCE. (3) (3 lectures) This course enables one to gain an appreciation of the scope of food science as a discipline. Topics include introductions to chemistry, processing, packaging, analysis, microbiology, product development, sensory evaluation and quality control as they relate to food science.

333-211A,B BIOCHEMISTRY I. (3) (3 lectures) (Corequisite: 333-230A) Biochemistry of carbohydrates, lipids, proteins, nucleic acids; enzymes and coenzymes. Introduction to intermediary metabolism. (AUA Prereq change to coreq)

333-212A,B BIOCHEMISTRY LABORATORY. (2) (1 lecture, 1 lab) (Coreq: 333-211A,B)The laboratory use of ionic strength and pH; the chemical properties of carbohydrates, lipids, proteins and enzymes; the instruction of laboratory techniques such as titration, chromatography, the use of the analytical balance and the pH meter. (Awaiting University Approval)

333-251B FOOD CHEMISTRY I. (3) (3 lectures; 1-3 hour lab) (Prerequisite: 333-211A,B) A study of the chemistry and functionality of the major components comprising food systems, such as water, proteins, carbohydrates and lipids. The relationship of these components to food stability will be studied in terms of degradative reactions and processing.

333-300A FOOD ANALYSIS I. (3) (3 lectures; 1-3 hour lab) (Prerequisite: 333-251B) The theory and methodologies for the analysis of food products for moisture, fat, protein, ash and fibre (proximate analysis). The quantitative aspects of colour measurement and infrared spectroscopy are also developed in relation to the analysis of food systems.

333-315B FOOD ANALYSIS II. (3) (3 lectures; 1-3 hour lab) (Prerequisite: 333-300A) A more detailed treatment on the principal analytical techniques associated with the analysis of carbohydrates, lipids, proteins and vitamin constituents in food systems.

333-334B ANALYTICAL CHEMISTRY II. (3) (3 lectures; 1-3 hour lab) (Prerequisite: 333-213A or equivalent) Theoretical and practical aspects of potentiometric measurements (pH and other ion-selective electrodes), spectrophotometry, atomic absorption spectroscopy and automated chromatography.

334-200A PRINCIPLES OF MICROECONOMICS. (3) (3 lectures) The field of economics as it relates to the activities of individual consumers, firms and organizations. Emphasis is on the application of economic principles and concepts to everyday decision making and to the analysis of current economic issues

334-242A MANAGEMENT THEORIES AND PRACTICES. (3) (3 lectures) An introduction to contemporary management theories and practices in organizations of the food sector

334-343B ACCOUNTING AND COST CONTROL. (3) (3 lectures) An introduction to the basic principles and concepts of responsibility accounting and cost control, analysis and utilization of financial statements and control system data for decision making

336-251A,B MICROCOMPUTER APPLICATIONS. (3) (3 lectures and one 2-hour lab) A user level computing course oriented toward the use of microcomputers rather than programming. Networks, windows, FTP, web searching, e-mail, word processing, web pages, spreadsheets, slide shows, and other uses.

338-303A ADVANCES IN ATOMIC AND NUCLEAR SCIENCE. (3) (3 lectures and 1 conference) Contributions of the 20th century physical sciences towards understanding and investigation of atoms, molecules and nuclei. Classical and quantum-mechanical models. Interaction of matter and radiation. Natural and artificial radioactivity.

338-405B TRACER TECHNIQUES. (3) (3 lectures and one 3-hour lab) (Prerequisite: 338-303A or equivalent) Operation and theory of various radiation detectors; ionization chambers, G-M counter, proportional counter, solid and liquid scintillation counters, and autoradiography, counting statistics, measurements of environmental radioactivity; practice of radiological safety.

342-234B BIOCHEMISTRY II. (3) (3 lectures and one 3-hour lab) (Prerequisite: 333-211A) Metabolism in humans and domestic animals. The chemistry of alimentary digestion, absorption, transport, intermediary metabolism and excretion

342-323A MAMMALIAN PHYSIOLOGY. (4) (3 lectures and one 3-hour lab) (Prerequisite: 344-202B or equivalent) A study of the organization, functions and regulation of various organ systems in mammals. The nervous, endocrine, muscular, cardiovascular, respiratory, urinary, digestive and reproductive systems are discussed.

342-330A FUNDAMENTALS OF NUTRITION. (3) (3 lectures) (Prerequisite: 333-211A and 342-234B) A discussion of the nutrients; water, carbohydrates, lipids, proteins, minerals and vitamins, with particular emphasis on their functions in and essentially for the animal organism.

342-424A METABOLIC ENDOCRINOLOGY. (3) (3 lectures and one 3-hour lab) (Prerequisite: 342-323A) A detailed study of the endocrine system and its role in the maintenance of homeostasis in higher vertebrates, including the endocrine regulation of energy balance.

342-551B CARBOHYDRATE AND LIPID METABOLISM. (3)

342-552A PROTEIN METABOLISM AND NUTRITION. (3

348-330A,B EAP: FUNDAMENTALS OF ACADEMIC AND SCIENTIFIC WRITING. (3) (3 hours) (Prerequisite: entrance test. Restrictions: see above) The object of the course is to enable students who have previously mastered the basic elements of written English to produce well-written, well-researched, and well-documented scientific papers for an academic audience.

360-310A,B STATISTICAL METHODS I (3) (3 lectures and 1 2-hour lab) Measures of central tendency and dispersion; normal, student's t, chi square, and F distribution; estimation and testing hypotheses; analysis of variance for simple experimental designs; regression and correlations; binomial and Poisson distribution.

362-230B THE MICROBIAL WORLD. 1(3) (3 lectures and one 3-hour lab) The occurrence and importance of microorganisms (especially bacteria) in the biosphere. Principles governing growth, death and metabolic activities of microorganisms. An introduction to the microbiology of soil, water, plants, food, man and animals.