



Program Planning Guide

Current and past Program Planning Guides are available on the UofL website at www.uleth.ca/ross/ppgs/ppg.html

Calendar Year: 2010/2011

Faculty: Arts & Science

About the Multidisciplinary Major in Agricultural Studies for the Post-Diploma B.Sc.

The Post-Diploma B.Sc. degree program in Agricultural Studies employs a multidisciplinary perspective, including courses in Agricultural Studies, Biological Sciences, Economics and Geography. The multidisciplinary nature of the program is complementary to the technical training from agricultural colleges and creates a distinctive program in agricultural education. This program is enriched by the chance for students to gain practical skills through Co-op studies, summer employment opportunities and Applied and Independent Studies with professors and scientists.

Approved Two-Year College Diplomas

At the time of printing (March 2010), the following two-year college diplomas have been approved:

Assiniboine Community College

Agribusiness

Lakeland College

Agri-Business
Agro-Environmental Technology
Animal Health Technology
Animal Science Technology
Crop Technology
Diversified Livestock Production (prior to 2004)
Herd Health Technology (prior to 2006)
Livestock Production

Lethbridge College

Agricultural Technology: General Agriculture (prior to 2004), Animal Science, Financial Management (prior to 2004), Plant and Soil Science, and Irrigation Production (prior to 2004)

Northern Alberta Institute of Technology (NAIT)

Animal Health Technology
Turfgrass Management Technology (prior to 2007)

Olds College

Agricultural Business
Agricultural Production and Management (formerly Agricultural Production)
Animal Health Technology
Crop and Agri-Food Technology
Horticulture (prior to 2004)
Land Agent
Land and Water Resources (formerly Land Resource Management)
Ornamental Horticulture
Production Horticulture
Seed and Grain (prior to 2004)
Turfgrass Management

Saskatchewan Institute of Applied Science and Technology (SIAS)

Veterinary Technology

For a complete listing of approved diploma programs, see UofL's Post-Diploma Degree Programs website: www.uleth.ca/postdiploma

Alberta Institute of Agrologists (AIA)

This program has been recognized by the Alberta Institute of Agrologists (AIA) which is the provincial organization representing agrologists. Students who complete the Post-Diploma B.Sc. program in Agricultural Studies with either the Biological Sciences Stream or the Geography Stream will have a degree recognized by the AIA. Students should contact the Coordinator of Agricultural Studies for further information.

Where to Go for More Information

Students should contact the Coordinator of Agricultural Studies and the Student Program Services Office (SU060 | phone: 403-329-5106) for further information.

Co-operative Education

A Co-op option, requiring three work terms, is available. Students interested in the Co-operative Education/Internship program should contact the Coordinator of Co-operative Education in the Career Resources Centre (B610 | phone: 403-382-7154) for further information.

This is a planning guide and not a graduation check or guarantee of course offerings. You should have a program check done in your final year of studies. Students are responsible for the accuracy of their own programs. The guide should be used in conjunction with the University of Lethbridge Calendar, which is the final authority on all questions regarding program requirements and academic regulations. Contact an Academic Advisor in the Faculty of Arts and Science for advising information.

Program Requirements

The post-diploma B.Sc. degree with a major in Agricultural Studies requires at least 20 semester courses with a minimum cumulative grade point average of 2.00.

Transfer Credit

Remember that you may use both University of Lethbridge credit and credit transferred from another college or university to meet degree and major requirements. Transfer credit may be either specified or unspecified. Specified credit is indicated on your transcript by the subject name and the specific number of the course, e.g., Biology 1010, Geography 1000, etc. Unspecified credit (1XXX, 2XXX, etc.) is indicated by the subject name and level of the course in parentheses, e.g., Biology (1000 level), Geography (2000 level), etc.

Unspecified Course Credit

Unspecified course credit means that the University of Lethbridge does not offer the same course you transferred in, but we recognize it and treat it as a regular course. An unspecified course would count as one of your maximum of 20 from one department, but it could not meet a specific course requirement. For example, if Biology 1010 is required in your program, you could not use Biology (1000 level) to fulfill that requirement. Students with unspecified transfer credit need to consult an Academic Advisor to establish how the transfer credit fits in the degree program. This should be done as soon as possible after transfer credit is awarded.

Program Worksheet

Name: _____

ID: _____

A. Required Core (12 courses):

- _____ 1. Agricultural Studies 1000 - The Evolution of Agriculture
- _____ 2. Agricultural Studies 3300 - Modelling of Agricultural Systems
- _____ 3. Agricultural Studies 4000 - Seminars in Agricultural Issues Series
- _____ 4. Biology 1010 - Cellular Basis of Life
- _____ 5. Economics 1010 - Introduction to Microeconomics
- _____ 6. Economics 3220 - Environmental Economics
- _____ 7. Economics 3300 - Agricultural Policy I
- _____ 8. *Geography 3210 - Agricultural Geography
- _____ 9. ONE of:
 - _____ **Philosophy 3402 - Biomedical Ethics
 - _____ **Philosophy 3406 - Business Ethics
- _____ 10. Statistics 1770 - Introduction to Probability and Statistics
- _____ 11. ONE of:
 - _____ English 1900 - Introduction to Language and Literature
 - _____ History 1000 - Western Civilization
 - _____ Philosophy 1000 - Introduction to Philosophy
 - _____ Religious Studies 1000 - Introduction to World Religions
- _____ 12. ** ONE additional course from List I (Fine Arts and Humanities Courses)

B. Choose ONE of the following streams, each consisting of eight courses.

Biological Sciences Stream (EIGHT courses):

- _____ 1. *Biology 2000 - Principles of Genetics
- _____ 2. *Biology 2200 - Principles of Ecology
- _____ 3. Chemistry 1110 - Chemistry for Life Sciences I
- _____ 4. Chemistry 2120 - Chemistry for Life Sciences II
- _____ 5-8. Four of:
 - _____ Biology 3000 - Gene Expression and Regulation
 - _____ Biology 3105 - Signal Transduction
 - _____ **Biology 3310 - Developmental Biology
 - _____ Biology 3400 - Principles of Microbiology
 - _____ Biology 3420 - Animal Physiology
 - _____ Biology 3460 - Plant Physiology
 - _____ Biology 3520 - Invertebrate Zoology
 - _____ Biology 3530 - Vertebrate Zoology
 - _____ Biology 3560 - Integrative Plant Biology
 - _____ ***Biology 3610 - Prairie Conservation
 - _____ Biology 3700 - Ecosystem and Community Ecology
 - _____ Biology 4100 - Advances in Agricultural Biotechnology
 - _____ ****Biology 4170 - Plant Biotechnology
 - _____ Biology 4560 - Plant Development

* Students in the Post-Diploma B.Sc. in Agricultural Studies are considered to have the background that satisfies the prerequisite for each of these courses.

** Prerequisite required: Biochemistry 2000.

*** Prerequisite required: Environmental Science 2000.

**** Prerequisite required: Biology 3210.

Note: Students choosing to complete courses in the Biological Sciences Stream that require additional prerequisites will need to complete more than the minimum 20 courses for the Post-Diploma B.Sc.

Note: Students may count Special Topics courses (i.e., Biology 3850 and Biology 4850) toward the Biological Sciences Stream provided:

- 1. They are clearly related to the Stream; and,
- 2. They are approved by the Coordinator of the program.

Note: Students may include a maximum of two Special Topics courses in their degree program.

* Students in the Post-Diploma B.Sc. in Agricultural Studies are considered to have the background that satisfies the Geography prerequisite (Geography 2210) for Geography 3210.

** Students should choose Philosophy 1000 as background preparation for Philosophy 3402 and 3406.

Geography Stream (EIGHT courses)

- 1-8. Eight of:
- _____ Environmental Science 2000 - Fundamentals of Environmental Science
 - _____ *Geography 2300 - Weather and Climate
 - _____ *Geography 2700 - Geographical Data and Analysis
 - _____ *Geography 2735 - Introduction to Geographical Information Science
 - _____ Geography 3075 - Environmental Resources Management
 - _____ Geography 3080 - Soils
 - _____ Geography 3400 - Hydrology I
 - _____ Geography 3700 - Cartography
 - _____ Geography 3720 - Remote Sensing
 - _____ Geography 3740 - Geographical Information Systems
 - _____ Geography 4060 - Agricultural Soil Management

- _____ Geography 4065 - Irrigation Science
- _____ Geography 4200 - Project in Agricultural Geography
- _____ Geography 4400 - Hydrology II
- _____ Geography 4415 - Integrated Watershed Management
- _____ Geography 4725 - Advanced Remote Sensing
- _____ Geography 4740 - Advanced Geographical Information Systems

* Students in the Post-Diploma B.Sc. in Agricultural Studies are considered to have the background that satisfies the prerequisite for each of these courses.

Note: Students may count Special Topics courses (i.e., Geography 3850 and Geography 4850) toward the Geography stream provided:

1. They are clearly related to the stream; and,
2. They are approved by the Coordinator of the program.

Note: Students wishing to pursue the Concentration in Geographical Information Science must complete Geography 2700, Geography 2735, Geography 3720, and Geography 3740 among the eight courses required in the Geography Stream.

Note: Students should refer to the current Calendar to ensure they have completed the prerequisites for the above courses.

Optional Concentrations

Concentration: Agricultural Business

Students in the Post-Diploma B.Sc. in Agricultural Studies degree program may declare a Concentration in Agricultural Business.

In addition to the minimum of 20 courses required for this degree program, students must complete a minimum of FIVE courses for the Concentration in Agricultural Business as follows:

a. For holders of diplomas other than diplomas in Agribusiness, the required courses include:

- _____ 1. Management 2100 - Introductory Accounting
- _____ 2. Management 3020 - Marketing
- _____ 3-5. THREE of:
 - _____ Economics 3030 - Managerial Economics
 - _____ Economics 3080/Management 3780 - Principles of Industrial Organization
 - _____ Management 3010 - Management Law
 - _____ Political Science 2410 - Public Administration
 - _____ *Political Science 3420/Management 3050 - Human Resource Management

*Has prerequisites: Students should choose Political Science 2410 for this concentration and also need to complete Writing 1000 or a university English course (3.0 credit hours).

b. For holders of diplomas in Agribusiness, the required courses include:

- _____ 1. *Management 3040 - Finance
- _____ 2. One of:
 - _____ Management 3470 - Corporate Finance
 - _____ *Management 4230 - Marketing Management
- _____ 3-5. Three of:
 - _____ Economics 3030 - Managerial Economics
 - _____ Economics 3080/Management 3780 - Principles of Industrial Organization
 - _____ *Management 3061 - Information Systems and Management¹
 - _____ *Management 3210 - Consumer Behaviour²
 - _____ *Management 4220 - International Marketing
 - _____ Political Science 2410 - Public Administration

*Students who hold diplomas in Agribusiness are considered to have background that satisfies the Management prerequisites for these required courses and may not receive credit for Management 2030 or Management 2000 (prior to 2003/2004), Management 2060, Management 2400 or Management 3020 at the University of Lethbridge.

¹ Has corequisite: One of Writing 1000 or a university English course (3.0 credit hours).

² Has prerequisite: One of Writing 1000 or a university English course (3.0 credit hours).

Note: Students may not double count courses required for the Concentration in Agricultural Business in fulfilling requirements for the General Liberal Education core. Students must select a List II course that is not required for the Concentration in Agricultural Business.

For students who complete, in addition to the minimum 20 courses for this B.Sc. degree program, all five courses (as specified in a. or b. above), the Concentration in Agricultural Business will be acknowledged on the official transcript.

Concentration: Geographical Information Science

Students in the Post-Diploma B.Sc. in Agricultural Studies degree program may declare a Concentration in Geographical Information Science.

Required courses for the Concentration in Geographical Information Science include:

- _____ 1-4. Four of:
 - _____ *Geography 3700 - Cartography OR Geography 4730 - Spatial Statistics
 - _____ *Geography 4400 - Hydrology II OR *Geography 4415 - Integrated Watershed Management
 - _____ Geography 4700 - Advanced Computer Mapping
 - _____ Geography 4710 - Remote Sensing Field School
 - _____ *Geography 4725 - Advanced Remote Sensing
 - _____ *Geography 4740 - Advanced Geographical Information Systems
 - _____ Geography 4751 - Seminar in Spatial Modelling
 - _____ Geography 4752 - Seminar in Geographical Information Systems
 - _____ Geography 4753 - Seminar in Remote Sensing

5. Required Cognate:

- _____ Computer Science 1620 - Fundamentals of Programming I

* Students may not double count courses required for the Concentration in Geographical Information Science in fulfilling requirements for the Geography Stream. In such cases, students must select another option from the Geography Stream.

For students who complete, in addition to the minimum 20 courses for this B.Sc. degree program, all five courses, the Concentration in Geographical Information Science will be acknowledged on the official transcript.

Sample Sequencing Plan

Shown below is a sample sequence of courses for your degree. If you follow this plan, you should be able to graduate in two years, provided you complete five courses per semester. This is just one example of how you could complete your major and degree requirements; you may find that a different sequence works as well as this one.

Biological Sciences Stream

Year 1, Fall Agricultural Studies 1000 Biology 1010 Chemistry 1110 Economics 1010 One of: English 1900, History 1000, Philosophy 1000, Religious Studies 1000	Year 1, Spring Biology 2000 Chemistry 2120 Economics 3220 Philosophy 3402 or Philosophy 3406 Statistics 1770
Year 2, Fall Agricultural Studies 3300 Biology 2200 Biology 3000/4000 level Economics 3300 Geography 3210 ¹	Year 2, Spring Agricultural Studies 4000 Biology 3000/4000 level Biology 3000/4000 level Biology 3000/4000 level GLER course (List I)

¹ Students in the Post-Diploma B.Sc. in Agricultural Studies are considered to have the background that satisfies the Geography prerequisite (Geography 2210) for Geography 3210. Semester of offering may vary.

Note: Students choosing to complete requirements for the Concentration in Agricultural Business or in Geographical Information Science should contact the Program Coordinator and/or Arts and Science Student Program Services early in their program for assistance in planning sequencing for the required courses.

Terms Used

GLER course: A course that could count toward the General Liberal Education Requirement. You may use courses in your major towards this 12-course requirement. See the 2010/2011 University of Lethbridge Calendar, Part 4 - Academic Regulations (p. 85) for complete information.

Elective: A course that you may choose freely from all those available and applicable to your program. Use courses inside or outside your major, bearing in mind any restrictions that may apply (e.g., a maximum of 20 courses from any one department).

Geography Stream

Year 1, Fall Agricultural Studies 1000 Biology 1010 Economics 1010 One of: English 1900, History 1000, Philosophy 1000, Religious Studies 1000 GLER course (List I)	Year 1, Spring Economics 3220 Philosophy 3402 or Philosophy 3406 Statistics 1770 Required Stream course (2000 level) ¹ Required Stream course (2000 level) ¹
Year 2, Fall Agricultural Studies 3300 Economics 3300 Geography 3210 ² Required Stream course Required Stream course	Year 2, Spring Agricultural Studies 4000 Required Stream course Required Stream course Required Stream course Required Stream course

¹ Students should complete 2000-level courses in order to satisfy prerequisites for other chosen courses in the Geography Stream.

² Students in the Post-Diploma B.Sc. in Agricultural Studies are considered to have the background that satisfies the Geography prerequisite (Geography 2210) for Geography 3210. Semester of offering may vary.

Note: Students choosing to complete requirements for the Concentration in Agricultural Business or in Geographical Information Science should contact the Program Coordinator and/or Arts and Science Student Program Services early in their program for assistance in planning sequencing for the required courses.

