AGRICULTURE (AGRI)

AGRI 1010 Business Communication 3 cr
Strengthen the thinking, writing, speaking and listening skills required by IEAP students to succeed in the agricultural, food science or agri-business world. Students will develop an understanding of cultural influence in communication tasks used in academic and workplace settings.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: Must be enrolled in the Internationally Educated Agrologists Program.

AGRI 1600 Introduction to Agrifood Systems 3 cr
(Lab required) This course explores agricultural production systems with special focus on the Canadian Prairies. Students will develop scholarly, social, communication and professional skills that will enable them to be successful in the application of technical knowledge to food production challenges. This course will include a field trip component. May not be held with the former AGRI 1500.
Mutually Exclusive: AGRI 1500
Attributes: Recommended Intro Courses

AGRI 2002 Agricultural and Food Sciences Co-operative Education Work Term 1 3 cr
A work assignment of a minimum of 420 hours in business, industry, government or research for co-operative education students. Requires submission of a written report covering the work completed during the professional assignment. This course is restricted to students where a co-operative education work term placement in the Agricultural and Food Sciences Co-operative Edcuation Program has been confirmed. May not be held with the former AGRI 4550. Course evaluated on a pass/fail basis.
Mutually Exclusive: AGRI 4550

AGRI 2030 Technical Communications 3 cr
Lectures and workshops to develop written and oral communication skills for preparing and presenting scientific and technical reports. Basic composition skills, communication graphics and job interview techniques are included.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: 24 credit hours of University coursework.
Attributes: Written English Requirement

AGRI 2180 Introductory Toxicology 3 cr
A survey of general principles underlying the effects of toxic substances on biological systems, including history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants. This course is co-taught with BIOL 2380 and ENVR 2180. May not be held with BIOL 2380 (BIOL 2381), the former BIOL 2382, ENVR 2180, ENVR 2190 or the former AGRI 2190.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: [BIOL 1030 (BIOL 1031) or HEAL 1502] and [(CHEM 1100 (CHEM 1101) and CHEM 1120 (CHEM 1121)) or one of CHEM 1110 (CHEM 1111) or CHEM 1130 or the former CHEM 1320 or the former CHEM 1310 (the former CHEM 1311)].
Equiv To: BIOL 2380, BOTN 2180, ENVR 2180, ZOOL 2180
Mutually Exclusive: AGRI 2190, BIOL 2382, BOTN 2190, ENVR 2190, ZOOL 2190

AGRI 2300 Indigenous Issues in Food Systems 3 cr
An overview of the historical and contemporary relationships between food systems and Indigenous people. The course will provide background to allow students to craft their own solutions to food system issues faced by Indigenous people.

AGRI 2400 Experimental Methods in Agricultural and Food Sciences 3 cr
(Lab required) Experimental design and data analysis using examples relevant to agricultural, food and human nutritional sciences. Ethics in research; critical thinking in data analysis; quantitative data analysis methods; applications of statistical analyses.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: AGRI 1600 or HNSC 1200 or HNSC 1210 or the former AGRI 1500.
Attributes: Mathematics Requirement

AGRI 2500 Managing Farm Safety 3 cr
This course provides introductory information on farm safety. It is designed to raise awareness about safety issues and legislation in the agricultural industry, and to encourage students to reflect upon safety at their own worksite or in farm operation. May not be held with the former DAGR 0520 or DAGR 0660 when titled “Introduction to Farm Safety.”
Mutually Exclusive: DAGR 0520, DAGR 0660

AGRI 2510 Managing Farm Business Transition 3 cr
This course is designed to provide students with the tools and knowledge to incorporate transition management into farm business management planning. Students will be introduced to profiles/dynamics, business structures, as well as financial and managerial influences that affect farm and business transition options. There will be an application of real farm examples as context to the instructional material. May not be held with the former DAGR 0550 or DAGR 0660 when titled “Succession/Transition Considerations in Farm Management.”
Mutually Exclusive: DAGR 0550, DAGR 0660

AGRI 3002 Agricultural and Food Sciences Co-operative Education Work Term 2 3 cr
A work assignment of a minimum of 420 hours in business, industry, government or research for co-operative education students. Requires submission of a written report covering the work completed during the professional assignment. This course is restricted to students where a co-operative education work term placement in the Agricultural and Food Sciences Co-operative Education Program has been confirmed. Course evaluated on a pass/fail basis. May not be held with the former AGRI 4560.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: AGRI 2002 or the former AGRI 4550.
Mutually Exclusive: AGRI 4560

AGRI 3030 Modern Topics in Agriculture 1 3 cr
An interdisciplinary course including topical national and international issues in agriculture. The course will vary from year to year to provide material of current interest in a wide variety of subject areas. Student participation by means of seminars will be encouraged.
Mutually Exclusive: ABIZ 2620, HRIR 2440, HRIR 2441

AGRI 3040 Modern Topics in Agriculture 2 3 cr
Similar to AGRI 3030.

AGRI 3100 Introduction to Digital Agriculture 3 cr
(Lab required) An introduction to precision agriculture and innovative farming principles discussing digital agriculture from farm to fork. Students will develop a concrete understanding of the theoretical and practical knowledge of computational agriculture, data-driven modelling, and agriculture data science in modern farming systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: One of AGRI 2400, STAT 2000, STAT 2001, or ENG 2030 or permission from the instructor.

AGRI 3500 Geographical Information Systems (GIS) Applications in Agriculture 3 cr
Geographical information systems (GIS) applications are becoming widespread in modern agriculture. This course introduces students to fundamental concepts as well as recent developments in GIS pertaining to agriculture. Students will engage in spatial analyses that include mapping and summarizing soil, crop, livestock, and weather datasets. During these analyses, students will experience the complete GIS workflow by downloading and inputting data into GIS software, quality controlling and pre-processing datasets, using GIS analytical tools, and exporting spatial products such as digital maps. Students are encouraged take GEOG 3730 or GEOG 2200 in advance of AGRI 3500.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: A minimum 60 credit hours of university level courses.

AGRI 4000 Practising the Profession of Agrology 1 3 cr
Introduction to the profession of Agrology in Manitoba with an emphasis on understanding the structure of the agriculture industry, the agriculture network and how it functions. Laboratory sessions will focus on guest speakers and tours of companies and agencies in the agriculture industry.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Must be enrolled into the Internationally Educated Agrologists Program (IEAP).

AGRI 4002 Agricultural and Food Sciences Co-operative Education Work Term 3 3 cr
A work assignment of a minimum of 420 hours in business, industry, government or research for co-operative education students. Requires submission of a written report covering the work completed during the professional assignment. This course is restricted to students where a co-operative education work term placement in the Agricultural and Food Sciences Co-operative Education Program has been confirmed. Course evaluated on a pass/fail basis. May not be held with the former AGRI 4570.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: AGRI 3002 or the former AGRI 4560.
Mutually Exclusive: AGRI 4570

AGRI 4010 Practising the Profession of Agrology II 3 cr
This course will cover the role of a practising agrologist in Manitoba, with an emphasis on professional ethics and responsibilities, regulations of the agriculture profession in Canada, and the culture of the work environment. Laboratory sessions focus on guest speakers and tours of companies and agencies in the agriculture industry.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students must be enrolled in the Internationally Educated Agrologists Program.

AGRI 4100 Current Issues in Agricultural Systems 3 cr
Integration of current issues in agricultural systems including land, plant, and animal systems, coupled to the food and nutrition needs of society. Emphasis on ethics, equity, economics, and professional approaches to challenges in food systems using case studies, teamwork and scientific communication to specialists and the public. This is a capstone course restricted to students in year 4 of the B.Sc. Agribusiness, Agriculture, or Agroecology degree programs. May not be held with FOOD 4100 or HNSC 4100.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: AGRI 2030 and Faculty approval.
Mutually Exclusive: FOOD 4100, HNSC 4100