

PLNT 0760 SPECIAL CROPS

General Goal: You will learn about the background, history, agronomy, marketing, and utilization of special crops suitable for Manitoba. You will be able to apply this knowledge to make informed decisions about incorporating special crops into your cropping rotations in Manitoba. You will learn by listening to lectures, asking questions, reading and critically analysing ideas, working on projects in a team, giving a class presentation, playing a game, participating in a market simulation, doing information searches, preparing a crop budget, visiting a field, and writing a final exam.

Course Outline:

1. Special Crops - What are they?

How are they different from commodity crops? How important are special crops to Manitoba? Where do you obtain information for special crops?

2. Suitability of Special Crops for Manitoba

How do you decide which special crop to grow? Does it suit your area limitations, management goals? Where does it fit in the crop rotation? What should your expectations as a first-time grower be?

3. Special Crops Production and Marketing

Description and adaptation (where in Manitoba?). Utilization (who is the consumer?). Market opportunities and risk. Yield potential (appropriate production targets). Cultural practices (how to optimally manage the special crop, including fertilizing, seeding, weed/disease/insect control, harvesting, soil management, crop rotations).

for: *(not necessarily in this order)*

Beans, Buckwheat, Canaryseed, Corn, Fababean, Lentils, Mustards, Peas, Potato, Soybeans, Sunflowers, Sugar Beets

Others . . . such as amaranth, astragalus, basil, borage, calendula, caraway, catnip, chamomile, chickling vetch, chickpea, coriander, cumin, dill, echinacea, evening primrose, fenugreek, feverfew, garlic, ginseng, hemp (low THC), horseradish, Jerusalem artichoke, lavender, lupin, milk thistle, millets, mint (peppermint, spearmint), monarda, oregano, quinoa, sorghum, stevia, thyme, valerian . . . according to interest and time

Evaluation: LECTURES (Monday/Wednesday/Friday 12:30 - 1:20 PM, Room 138)

Assignments Total of 30%

Interview (5 marks) by the middle of October

Class Presentation (5 marks)

Periodic quizzes on class material and assigned readings (5 marks)

Ultra Specialty Crop (5 marks) due November 9

Commercial Special Crop (5 marks) due November 13

Special Crops Marketing Exercise (5 marks) participation

Note: VW date without academic penalty is November 18.

35% Final Exam (in regularly scheduled exam period)

LABORATORY (Tuesdays 2:30 - 3:50 PM Room 134 Agriculture)

15% 5 lab reports (3 marks each)

20% Final Lab Exam (in lab, December 2)

- identification of plants and seeds and short practical questions from lab material
(both lab groups will attend this exam)

Students will be assigned into two groups for the laboratory. An individual student will only attend the Special Crops lab every second week. Except for very good reasons, students should consistently attend with the lab group to which they have been assigned. Both groups will attend the final Special Crops lab exam in class on November 17

PASS = completion of all components and pass in lecture and lab. Late assignments docked 10% per day.

Note: Students are referred to the General Academic Regulations And Policy section of the University of Manitoba General Calendar for statements concerning academic dishonesty, particularly the statements on "plagiarism and cheating" and "examinations - personations".(Online at <http://webapps.cc.umanitoba.ca/calendar/>)

Instructor: Gary Martens, Room 109 Agriculture Building

474-6097, gary_martens@umanitoba.ca Available: Monday-Friday 9AM-4:30PM except when in class or in meetings.

No required textbooks. Lab material will be handed out during the lab period.