## Dalhousie University, Faculty of Agriculture

#### AGRI5710 and AGRI5705: Graduate Module Course

## **Module Offering Request**

Please complete and send in electronic form to Dian Patterson, Course Coordinator, Haley Institute, <a href="mailto:dian.patterson@dal.ca">dian.patterson@dal.ca</a>. This form must be submitted by the Instructor of the module and approved before the module begins. The Course Outline for AGRI5710/5705 (available at Faculty of Agriculture Graduate Program website, or from the Course Coordinator) provides further details on the course structure.

**Module Title:** Pollination: from the plant's perspective

Instructor: Dr. Nancy McLean

**Dates module will be offered**: Late June to early August 2017

Frequency of formal classes/meetings: weekly, depending on availability of students

# **Module Content and Learning Objectives:**

The module will examine studies related to landscape management for the purpose of conserving and promoting native pollinators. Focus will be primarily on plant characteristics which positively impact pollinators. The module will promote learning related to different ways in which plants reproduce and how this impacts their attractiveness or lack, thereof, to pollinators.

The initial meeting will be an introduction to plant reproductive strategies as well as a detailed description of the course format and requirements.

Students will be required to find two papers and distribute them via email to the course participants 1 week in advance of a class. The two papers must be critically reviewed and presented to the course participants, followed by discussion. The papers must be related to the topic of conservation of pollinators and the presentation must address how plants are implicated in the research. This activity will be repeated once with different papers, although the earlier papers should be integrated into the discussion.

The final requirement is a review paper (10-20 double-spaced pages) on a specific aspect of plant/pollinator interaction. The paper must be submitted in written format as well as an oral presentation (10 minutes plus time for questions and discussion) to the group.

## **Learning Objectives:**

Following completion of this module, participants will be able to:

- 1. Critically analyze literature related to pollinator research
- 2. Appreciate and explain the complex nature of plant/pollinator interactions

- 3. Explain why particular flowering plants are beneficial to particular pollinators while other flowering plants provide minimal benefits
- 4. Explain why different pollinators are associated with different types of flowering plants
- 5. Explain why certain plants and pollinators are at risk
- 6. Formulate a hypothesis, integrate available knowledge and arrive at a conclusion on a pollination-related topic

#### Method of Evaluation:

Assignments: 2 X 20% each = 40%

Discussion: 2 X 5% each = 10%

Paper: 30%

Presentation: 20%

Total: 100%

Any restrictions on enrollment: number of students, background preparation or prerequisite courses:

Graduate student standing