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, <u>dian.patterson@dal.ca</u> 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: Digital Image Processing

Instructor: David Barrett

Dates module will be offered: May-June 2017

Frequency of formal classes/meetings One introductory lecture

Module Content and Learning Objectives

Students will spend most of the module planning, carrying-out, and presenting a digital image processing assignment of their own research images or images from their fields of research. The instructor will approve of and provide some assistance with this assignment. Every student will have designated periods of time to use the image processing system(s). Each student will be involved in presentation peer evaluation.

Students will be required to study relevant background material.

The final exam will cover image processing, concepts of processing, and examples of digital image processing.

- Students will learn about digital image processing and concepts of processing.
- Students will learn to identify and examine many examples of digital image processing from our everyday lives and own imaging based research areas.
- Students will learn to plan, execute, and present a digital image processing assignment of their own research images or images from their fields of research.

Method of Evaluation: The overall grade will be based on the assignment (45%), presentation of the assignment (20%; including presentation peer-evaluation), and final examination (35%; 1 h based on theory and applications).

Any restrictions on enrollment: number of students, background preparation or prerequisite courses Prerequisites: STAA 2000 or equivalent (required); CSCI 1000 or equivalent (recommended)