

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, dian.patterson@dal.ca. 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: Salinity as an Ecological Factor in Estuaries

Instructor: Dr. Jim Duston

Dates module will be offered: Start Week of Jan 16-20, 2017. End around: Friday February 17

Frequency of formal classes/meetings: 1.5 hours once or twice a week (flexible).

Module Content and Learning Objectives

1. Physical characteristics of estuaries
2. Estuarine ecosystems: challenges and rewards
3. Osmoregulatory mechanisms from bacteria to bass
4. Spatial and temporal distribution of species within an estuary

Each class will start with theme material presented by J. Duston (15 mins), then each student contributes to a discussion considering how their 'assigned' species fits into the estuarine ecosystem. Students may include handouts or powerpoint slides.

Method of Evaluation:

1. Written paper (60%): At the start of the module each student is assigned/chooses an organism/group, ideally one they are studying for their thesis. Written as a research proposal. Includes a literature review that establishes the state of knowledge and identifies an area of uncertainty. State a hypothesis and how it could be tested (budget unlimited), explaining the experimental approach and design, and time frame.
2. Communication skills (15%): Clarity and engagement in class discussions and activities.
3. Exam (25%): Short questions and answers based on material presented by J. Duston in class.

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

Maximum: 8 students. No other requirements