

Course Number and Title		AGRI 5710/5705: Module Course Plant Secondary Metabolites	
Module Description This graduate module provides a basic knowledge about the perspectives of plant secondary metabolites with emphasis on the current scientific knowledge and awareness of their ecological functions, biosynthesis and metabolic control, biological activity, and economic significance.			
Hours per week: 2 per week; 10 weeks		Lecture 1	Laboratory 3
Semester Offered: Summer (May-June)		Offered every year: Yes If NO, date next offered:	
Credits	NSAC:	ECTS:	
Prerequisites	An undergraduate or graduate course in plant physiology or plant biochemistry		
Instructor	Dr. Vasantha Rupasinghe		
Module Objectives <i>To give an introduction to plant secondary metabolites, including: (i.) an overview of plant secondary metabolism; (ii.) classes, functions, and biosynthesis of isoprenoids, phenolics and alkaloid; and (iii.) introduction to selected biologically active plant secondary metabolites and their physiological effects.</i>			
Evaluation Methods			
Participation in class discussions	10%		
Assignments		10%	
Writing a mini-review		60%	
Oral presentation	20%		
Required Texts and/or Major References N/A			
Lecture and Laboratory Outline			
The graduate module consists of combination of lectures, discussions, reading/writing assignments, student-led literature review and a presentation. Lectures, class discussions, and assignments will cover introduction to plant secondary metabolism, biosynthesis, classes and functions of isoprenoids, phenolics and alkaloids, and introduction to biologically active major plant secondary metabolites.			
The writing of a mini-review will provide an opportunity to explore and expand knowledge on a specific topic within plant secondary metabolites. Students will share the information of the literature review with the class and designated researcher(s)/advisor(s) in an oral presentation toward the end of the course.			