

Dalhousie University, Faculty of Agriculture

AGRI5710: Graduate Module Course

Module Title:

The impact of stock density and legumes in temperate livestock systems on productivity and soil carbon.

Instructor:

John Duynisveld

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Dates module will be offered:

May 4 to May 29

Frequency of formal classes/meetings

Twice weekly video/teleconference discussions, approximately 1 to 1.5 hours each, dates to be finalized based on student availability

Module Content and Learning Objectives

The module will focus on how changes in pasture livestock density influence the productivity of the land, the livestock, and soil organic matter. Also, the role of legumes in pasture system will be discussed, to look at both how legume levels can influence sward and livestock productivity, and how livestock management may influence legume content in swards.

The overall objective of the module will be to develop and understanding of how these elements of pasture management can be used as a tool to improve productivity in an environmentally sustainable way.

As much as possible the module will draw from current research papers based in temperate regions, although as the research area of stock density is relatively recent, the scope may be broadened beyond temperate regions as needed. The initial course class will be a chance for the students and the instructor to discuss expectations and for a general overview of the module topics. The instructor will email one relevant peer reviewed research paper at least 3 days before each class discussion for the students to review (a different paper for each student). The students will be expected to discuss 2 key concepts in that paper, and find 1 related research paper that supports the provided paper that they can discuss with the instructor and other students. They will also be asked to find one peer reviewed paper that contradicts or does not support the paper the instructor provided. The students will give a 5 minute oral presentation to summarize their findings, followed by a 10-15 minute period of discussion with the instructor and other students. After each of the students have presented an instructor-led discussion on the subjects for that day will take place for the remainder of the class. A final report will be due on the last day of class, with a 1500-2000 word summary of each of the presentations that the student gave through the course.

Method of Evaluation:

Presentations (6 in total): 40%

Class participation: 40%

Final written report: 20%

See attached marking rubric for each class presentation and the summary paper.

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

Maximum of 4 students, with at least 1 background in forage or ruminant livestock, or significant interest or experiences in forages and or ruminant livestock

Name	
Date	
Paper Title	

		0	1	2	3	4	Mark
Presentation	relevance of supporting paper	No relevance or no paper	Weakly related but no direct areas in common	One area of common results	Two areas of common results	three or more areas of commonality with the subject paper	
	relevance of dissenting paper	No relevance or no paper	Weakly related but no direct areas in common	One area of common results	Two areas of common results	three or more areas of commonality with the subject paper	
		0	2	4	6	8	
	presentation	no presentation	less than 3 minutes or over 10 minutes and poorly organized	Lacking in two of follow: proper time, clear progression, focus	Lacking in one of follow: proper time, clear progression, focus	time of 4.5-6 minutes, clear progression of ideas, well focused,	
		0	2	4	6	8	
Participation	depth of disucssion on supporting paper	student was unable to relate the papers	Student was weak in disucssing how the papers related	student could discuss at least 1 area of commonality with the subject paper using their background knowledge as well as information from the papers in the discussion.	student could discuss at least 2 area of commonality with the subject paper using their background knowledge as well as information from the papers in the discussion.	student could discuss at least 3 area of commonality with the subject paper using their background knowledge as well as information from the papers in the discussion.	
	depth of disucssion on dissenting paper	student was unable to relate the papers	Student was weak in disucssing how the papers related	student could discuss at least 1 area of commonality with the subject paper using their background knowledge as well as information from the papers in the discussion.	student could discuss at least 2 area of commonality with the subject paper using their background knowledge as well as information from the papers in the discussion.	student could discuss at least 3 area of commonality with the subject paper using their background knowledge as well as information from the papers in the discussion.	
						Total	

Name	
Date	

	1	2	3	4	5	Mark
Writing style: Grammar, spelling, punctuation	greater than 20 concerns	16-19 concerns	11-15 areas of concern	6-10 areas of concern	less than 5 areas of concern	
inclusion of 250-300 word summary for each presentation from module	missing 4 or more presentations given	missing 3 presentations or 4 or more are too short	missing 2 presentations or 2-3 are too short	missing 1 presentation or 1 summary is too short	all presentations included, in the range of 250-300 words for each	
References (includes papers provided plus student sourced)	References not included	References included but not used in paper	All references included, not all references used in paper.	Referenees all included and used, not APA standard	All references included and referenced to meet APA standard	
Summary of the presentations 300-400 words	student was unable to relate the papers to each other	Student was weak in summarizing how any of the papers related	student related 3 of papers well in summary	student related 4 of papers well in summary	student related at least 5 or 6 of the papers very well.	
					Total	