Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).

See <a href="http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/">http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/</a> for a complete description of the rules governing curriculum & course changes.

<i>JBMITTED BY:</i> Department							
	High Latitude	Agriculture	Coll	ege/School			SNRAS
Prepared by	Milan Shipka		Phon	<b>e</b>			7429
Email Contact	mpshipka@ala	ska.edu	Facu	lty Contact		M	ilan Shipka
1. ACTION D	DESIRED (CHECK ONE):	Trial C	ourse		New C	ourse X	
2. COURSE 1	DENTIFICATION:	Dept	NRM	Course #	210	No. of Credits	3
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3. PROPOSED	COURSE TITLE:						
4. To be CR	OSS LISTED? YES/NO		If yes,		Course	· #	
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6. E	PROPOSED COURSE E	TEES §
	Has a memo beer	n submitted through your dean to the Provost for fee
		approval?
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. PF	REVIOUS HISTORY	
p.	as the course bee reviously? <b>es/No</b>	en offered as special topics or trial course No
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Hav 474 ser res	4-6695) with rega rvices available	the library collection development officer (kljensen@alaska.edu ard to the adequacy of library/media collections, equipment, and for the proposed course? If so, give date of contact and c, explain why not.
	PACTS ON PROGRAM	•
Wha Inc	at programs/dep clude information o	partments will be affected by this proposed action? n the Programs/Departments contacted (e.g., email, memo)
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	annaifu <b></b>	tive and negative impacts on other courses, programs and
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Ple		ng from the proposed action.
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The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

Every day, farmers and ranchers around the world develop new, innovative strategies to produce and distribute food, fuel and fiber sustainably. While these strategies vary greatly they all embrace three broad goals:

- Profit over the long term
- Stewardship of our nation's land, air and water
- Quality of life for farmers, ranchers and their communities

ATTACH COMPLETE SYLLABUS (as part of this application). This list is online at:  $\underline{http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/uaf-syllabus-requirements/absolution-leading-to-the-leading-procedure-degree-procedure-degree-procedure-degree-procedure-degree-procedure-degree-procedure-degree-degree-procedure-degree-$ The Faculty Senate curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course (or changes to it) may be denied. SYLLABUS CHECKLIST FOR ALL UAF COURSES During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline): 1. Course information: lacktriangle Title, lacktriangle number, lacktriangle credits, lacktriangle prerequisites, lacktriangle location, lacktriangle meeting time (make sure that contact hours are in line with credits). 2. Instructor (and if applicable, Teaching Assistant) information: lacksquare Name, lacksquare office location, lacksquare office hours, lacksquare telephone, lacksquare email address. 3. Course readings/materials: lacktriangle Course textbook title, lacktriangle author, lacktriangle edition/publisher. lacksquare Supplementary readings (indicate whether lacksquare required or lacksquare recommended) and any supplies required. 4. Course description: ☐ Content of the course and how it fits into the broader curriculum; lacktriangle Expected proficiencies required to undertake the course, if applicable. lacktriangle Inclusion of catalog description is strongly recommended, and lacksquare Description in syllabus must be consistent with catalog course description. 5.  $\square$  Course Goals (general), and (see #6) 6. Student Learning Outcomes (more specific) 7. Instructional methods: lacktriangle Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.). 8. Course calendar: lacktriangledown A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say "lab". Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester. 9. Course policies: lacktriangle Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity. 10. Evaluation: lacktriangledown Specify how students will be evaluated, lacktriangledown what factors will be included, lacktriangledown their relative value, and  $\Box$  how they will be tabulated into grades (on a curve, absolute scores, etc.)  $\square$  Publicize UAF regulations with regard to the grades of "C" and below as applicable to this course. (Not required in the syllabus, but is a convenient way to publicize this.) Link to PDF summary of grading policy for "C": http://www.uaf.edu/files/uafgov/Info-to-Publicize-C Grading-Policy-UPDATED-May-2013.pdf 11. Support Services:  $\square$  Describe the student support services such as tutoring (local and/or regional) appropriate for the course. 12. Disabilities Services: Note that the phone# and location have been updated.  $\underline{http://www.uaf.edu/disability/} \qquad \text{The Office of Disability Services implements the Americans}$ with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials.  $\square$  State that you will work with the Office of Disabilities Services (208 WHITAKER

BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

There are almost as many ways to reach these goals as there are farms and ranches. However the popular press is rife with misconceptions about what sustainable agriculture really is all about and it is easy to accept these misconceptions without skeptical consideration. This course will apply proper rigor to the treatment of the subject of sustainable agriculture to help the student develop an understanding of the concepts that set sustainable agriculture apart from many traditional agriculture practices. In addition, this course will expose the student to the idea and concerns of food security in Alaska and other circumpolar regions.

APPROVALS: Add additional signatu	re lines a	as needed.		
			Date	
Signature, Chair, Program/Department of:				
	<del>-</del>		Date	
Signature, Chair, College/School Curriculum Council for:				
			Date	
Signature, Dean, College/School of:				
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Signature of Provost (if above le programs)	evel of ap	proved	,	
ALL SIGNATURES MUST BE OBTAINED P	RIOR TO SU	BMISSION :	TO THE	GOVERNANCE OFFICE
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Signature, Chair Faculty Senate Review Committee:	Curri	culum Revi	_ew	GAAC
	Core	Review	SA	DAC
DDITIONAL SIGNATURES: (As needed i	for cross-	listing ar	nd/or s	tacking)
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Signature, Chair, Program/Department of:	High.	Latitude	Agorca	ultire
Peter	V		Date	10/24/13
Signature, Chair, College/School Curriculum Council for:		SNRAS		
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Signature, Dean, College/School of:	SNAS	<del>,</del> >		

## NRM 210 Principles of sustainable Agriculture

3 cr

Instuctors - MP Shipka, MG Karlsson. M Zhang

Offered fall semester

Text – Toward Sustainable Agricultural Systems in the 21<sup>st</sup> Century (2010) Committee on Twenty-First Century Systems Agriculture; National Research Council 978-0-309-14896-2

<u>Course Objectives:</u> The student will develop a basic understanding of sustainable agriculture concepts and will be exposed to principles and ideas of sustainable agricultural practices. Agroecology is introduced as a backdrop for the development of sustainable techniques for soil, plant, and animal agriculture. Throughout the semester, sustainable agriculture concepts and principles will be related to current issues such as population growth, resource use and availability, and changing social structures and preferences.

<u>Student Learning Outcomes:</u> The student will demonstrate by the end of the semester a basic understanding of the concepts and principles of sustainable agricultural management in soil, plant, and animal contexts. Student Learning Outcomes include:

- 1) Ability to critically apply knowledge and integrate the science of sustainable agriculture with economic, social and environmental sustainability for agricultural practices in modern culture and societies.
- 2) The development of a basic understanding of sustainability science in global and U.S. agriculture and an appreciation for the biological, physical and social sciences that make up sustainable agriculture.

#### **Course Outline**

Week	Topic	Instructor
1	What is Sustainable Agriculture	Shipka
	Overview	
	Concepts and Themes	
	Three legs of sustainable agriculture	
	Economic, social, and political context	
2	Farming and Natural Resources	Shipka
	Is Organic Agriculture the same as Sustainable Agriculture?	
	Agroecology	
	Exam I	
3	Sustainable soils management	Zhang

4	Sustainable soils management	Zhang
5	Sustainable soils management – systems management	Zhang
	Exam II	
6	Sustainable field crop production concepts - Agronomy	Zhang or Karlsson
7	Sustainable field crop production concepts – Agronomy Exam III	Zhang or Karlsson
8	Sustainable plant production concepts - Horticulture	Karlsson
9	Sustainable plant production concepts – Horticulture Exam IV	Karlsson
10	Sustainable plant production concepts – Controlled environments	Karlsson
11	Sustainable plant production concepts – Controlled environments Exam V	Karlsson
12	Sustainable animal production concepts – Nutrition Animal welfare	Shipka
13	Sustainable animal production concepts – Grazing Animal Behavior Exam VI	Shipka
14	Sustainable animal production concepts – Integrated Livestock Management System Systems management	Shipka
15	Sustainable animal production concepts – Ecological & Sustainable Livestock Production Systems Reducing the Carbon Footprint Exam VII	Shipka

# Best way to do well in this class: 1) Attend the lectures,

- 2)
- 3)
- 4)
- Take good notes,
  Read the assigned readings before class,
  Download the PPT before or right after class,
  Go back through your notes and the PPT soon after class, and 5)
- Complete seven web based exam/assignments on time. 6)

### **Course Grading:**

Students will have seven web based exams/assignments, each covering the time period since the previous assignment, but also building on material that was presented since the course began. Each assignment is worth 100 points for a total of 700 points available for the entire class. The student will have one week to complete each assignment from the time the assignment is available on the web. Ten points will be deducted for each day an assignment is turned in late

Assigment #	Week of assignment	Week due	<b>Points</b>
I	End of Week 2	End of Week 3	100 points
II	End of Week 5	End of Week 6	100
III	End of Week 7	End of Week 8	100
IV	End of Week 9	End of Week 10	100
V	End of Week 11	End of Week 12	100
VI	End of Week 13	End of Week 14	100
VII	End of Week 15	Final Exam period	100

Total 700 points

Final course grades will be assigned on the following basis:

> 97%	$= \mathbf{A} +$	> 679 points
		-
92 - 96.9%	$= \mathbf{A}$	644 to 678 points
90 – 91.9%	$= \mathbf{A}$ -	630 to 643 points
87 - 89.9%	$= \mathbf{B} +$	609 to 629 points
82 - 86.9%	$= \mathbf{B}$	574 to 608 points
80 - 81.9%	$= \mathbf{B}$ -	560 to 573 points
77 - 79.9%	$= \mathbf{C} +$	539 to 559 points
72 - 76.9%	$= \mathbf{C}$	504 to 538 points
70 - 71.1%	= <b>C</b> -	490 to 503 points
Etc.		•

For important UAFgrading policy information, see the 2013-14 UAF Catalog, pages 47-49.

Disabilities Services: The Office of Disability Services implements the Americans with Disabilities Act (ADA) and insures that UAF students have equal access to the campus and course materials. I will work with the Office of Disabilities Services (203 WHIT, phone: 474-7043) to provide reasonable accommodation to students with disabilities.