

Sustainable Animal Agriculture (ANS 112)

Syllabus – Spring Quarter

Class Meets: T, Th: 9:00-10:20 AM

1330 Meyer

Instructor: E. Kebreab, 2111 Meyer, ekebreab@ucdavis.edu

Office hours: Tuesdays and Thursdays 10:30 – 11:30 or by appointment

Text book: Kebreab E. (Ed.). 2013. Sustainable Animal Agriculture

Course outline:

Lecture	Week	Lecture/Discussion Topic
1	1	Introduction to ANS 112 and Group Project
2	1	Module 1: What is Sustainability?
3	2	Module 2: Climate Change and its Impact on Animal Agriculture
4	2	Module 3: Environmental Sustainability – Mitigation/Adaptation I
5	3	Environmental Sustainability – Mitigation/Adaptation II
6	3	Module 4: Livestock management during Drought – J. Oltjen
7	4	Module 5: Environmental Sustainability - Nutrient pollution
	4	Independent work on Term project
	5	MIDTERM
8	5	Module 6: Production Efficiency of Animals
9	6	Module 7: Life-cycle Analysis – dairy system as an example
10	6	Module 8: Social impacts on sustainability
11	7	Module 9: Sustainable chicken production on the small farm; D. Bunn
12	7	Module 10: Are Transgenic Animals Sustainable? J. Murray
13	8	Module 11: Animal Welfare Issues in Sustainability
14	8	Module 12: Economic Sustainability of Farms
15	9	Module 13: Emerging issues in sustainability (antibiotic use, insects)
	9	Group work on final presentation
	10	Final Group Presentations
16	10	Future of sustainable animal agriculture/Wrap-up/Final Review

Assignments	Date	Grading
Quiz	Surprise quiz	10%
Midterm		25%
Group Project		15%
Final		40%
Participation	Every class	10%