

# 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](mailto: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%