

INTRODUCTION TO ORGANIC CROP PRODUCTION (CSES 2012)
Spring 2006

Note: The procedures and attached schedule for this course are subject to change in the event of extenuating circumstances.

I. General Information

Unless otherwise notified, Introduction to Organic Crop Production will meet Tuesdays and Thursdays from 3:30 to 4:20 pm in AGRI, 301A. Regular class attendance is expected and required.

Primary Instructor:

Dr. Larry Purcell, Room 223 Altheimer. Phone:575-3983. Email: lpurcell@uark.edu. Office hours: M, W, F 8:00 to 10:00. I will also arrange (at request) times on campus when I will be available.

Prerequisite: There are no prerequisites, but a general course in biology or ecology is recommended.

Text: There is no required text for the course. Outside readings will be distributed in class or assigned from the Web.

II. Course Description

Students will be introduced to the principles of organic agriculture and ecology and the regulations defining organic production and certification. Additional topics include crop rotations for pest management and for increasing soil organic matter, feeding the soil and plant nutrition, soil health, and green manuring. We will also briefly discuss corporate agriculture and genetically modified organisms. The course is targeted for freshmen and sophomore students who may or may not have a strong background in agriculture.

III. Overall Course Objectives

- A. To introduce concepts of ecology and their use in organic agriculture.
- B. To evaluate ecological principles used in organic agriculture for preventing pest problems and for managing soil health and fertility.
- C. To compare organic production methods with large-scale agricultural production, including a discussion of genetically modified organisms.
- D. To assess some of the challenges of organic crop production and its role in providing food for a hungry world.

IV. Grading

There will be a total of 600 possible points for the course. There will be three hourly exams of 100 points each, one of which will be given during your final exam time. There will be three homework assignments worth 50 points each. A demonstration report and report on our field trip will be worth 50 points each. There will also be 50 points that will be awarded for class attendance and participation.

Exam I	- February 10	100 points
Exam II	- March 11	100 points
Exam II	- Final exam period	100 points
Homework	- Three assignments	150 points
Demonstration report	- March 30	50 points
Attendance & Participation		50 points
Field trip & report	- April 20	<u>50 points</u>
Total		600 points

<u>Grade</u>	<u># Points</u>	<u>Percentage</u>
A	≥ 564	≥ 94
A-	≥ 540 < 564	≥ 90 < 94
B+	≥ 522 < 540	≥ 87 < 90
B	≥ 498 < 522	≥ 83 < 87
B-	≥ 480 < 498	≥ 80 < 83
C+	≥ 462 < 480	≥ 77 < 80
C	≥ 438 < 462	≥ 73 < 77
C-	≥ 420 < 438	≥ 70 < 73
D+	≥ 402 < 420	≥ 67 < 70
D	≥ 378 < 402	≥ 63 < 67
D-	≥ 360 < 378	≥ 60 < 63
F	< 360	< 60

V. Inclement Weather Policy

Students should go to the University homepage (www.uark.edu) to see if classes are canceled. Students should also use their discretion in deciding whether or not it is safe for **them** to drive to class.

Class Schedule for Introduction to Organic Crop Production (CSES 2012), Spring 2006

Class #	Date	Topic	Comment
1	1-17	What is organic agriculture?	
2	1-19	Advantages of organic agriculture.	Price comparison homework... 50 pts
3	1-24	Computer lab, Agri Annex 201	
4	1-26	Ecology of organic agriculture.	
5	1-31	Organic matter and soil properties setup.	homework #1 due
6	2-2	Ecology of plant mass production.	
7	2-7	Soil fertility and the N cycle.	
8	2-9	Feeding the soil for plant production.	
9	2-14	Organic fertilizers, composts, and green manures.	homework #2 assigned - 50 pts
10	2-16	Exam #1, 100 points	covering classes 1-9
11	2-21	Ecology of pests in organic agriculture... weeds	
12	2-23	Case study discussion of weed management.	homework #2 due
13	2-28	Ecology of pests in organic agriculture... insects.	
14	3-2	Compost and factors affecting rate of composting.	homework #3 assigned -50 pts
15	3-7	Soil physical properties.	Dr. Kris Brye
16	3-9	Soil chemical properties.	Dr. David Miller
17	3-14	Soil ecology.	Dr. Mary Savin
18	3-16	Exam #2, 100 points	covering classes 10-17
	3-21	NO CLASSES ... Spring Break	
	3-23	NO CLASSES ... Spring Break	
19	3-28	Differences between corporate and organic crop production	

20	3-30	What are GMO's? How are they made?	
21	4-4	GMO's continued	homework #3 due
22	4-6	No class	
23	4-8	Saturday field trip to Kerr Center, OK??	8 am to 4 pm
24	4-11	Organic nutrient management case study	
25	4-13	Organic beef production.	
26	4-18	Nutrient cycling in pastures	Kerr Center report due, 50 pts.
27	4-20	Organic matter infiltration, N cycle - results	
28	4-25	Organic certification - ATTRA	
29	4-27	Organic field crop production in Arkansas	Organic matter infiltration & N cycle reports due - 50 pts
30	5-2	Organic vegetable production in Arkansas	virtual field trip
31	5-4	Review	
32	5-10	Exam #3, 100 pts, 10 to 11:59 am	covering classes 19-29