

Syllabus
Tier III 402B call # **06167**
300 Porter Hall, 9:10-11:00 M-W

Instructor: Dr. Arthur Trese
Rm. 500 Porter
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Email: trese@ohio.edu

Office Hours: T & Th 10:00-11:00 or by appointment

Course web page: <https://blackboard.ohiou.edu/>

Bookmark this page! Any rain days will be announced here.

Username: Oak ID (2 letters 6 numbers)

Password: current OAK password

Texts: John Jeavons, How to Grow More Vegetables

Additional resources will be provided on course web site

Purpose of this course: To investigate global, and local, agriculture as a synthesis of human activities. The primary question we will be addressing is “Can a sustainable system of agriculture be developed to support the world’s human population?” Agriculture will be considered to include the production, from plants, of food, fiber, fuel, building materials, and medicines. In addition to gaining knowledge of agriculture through personal involvement, students will be asked to bring their individual perspectives and unique knowledge base to bear on the complex question of sustainable agriculture. Each student will be required to present a synthesis of knowledge focused on a particular topic, both orally and in writing.

Course Requirements:

- 1.) 25% of grade. With a partner, prepare, fertilize with compost, plant and care for a ≥ 100 sq. ft. garden, keeping a journal of time spent, planting dates and crops planted, new plants introduced and their uses, observations made in the garden, etc. These journals will be kept at the garden site, and checked at random throughout the course. On the last day of class the journal will be turned in to the instructor. Your journal will be returned if requested. An oral presentation to the class of your garden design, your successes and difficulties, and what you learned in the process, also fits into this category.
- 2.) 25% of the grade. Each student will outline and write a ten page paper addressing a particular problem associated with agriculture. In the paper you will discuss the problem, propose and discuss alternatives and use the perspective of your area of study if at all possible. I must approve topics by Monday, April 10th. During the

last week of class students will give a 20 minute oral presentation on their researched topic.

- 3.) 50% of the grade. There will be 3 exams (2 midterm and a final) over readings and material covered at the gardens, lectures, videos and student presentations.

One missed class will not affect your grade. Each subsequent unexcused absence will result in a lowered grade of 1/3. For instance, a grade of B+, but two days absent, will result in a grade of B, if three total days absent, a B-.

Calendar of events: **An asterisk (*) indicates that we will be meeting at the gardens, not at Porter Hall. If weather is questionable, always check the Blackboard site for an announcement prior to heading for class.**

Week of:

- March 27** Mon. Syllabus discussion,
What is Sustainability?
Some scenarios of impending future
Read Chapters 1, 2 and 6 from Jeavons for Wednesday
- *Wed.** Meet at West State Street gardens
Orientation, assign beds,
introduction to soils, origins, properties, organic matter
Discussion of soil quality and bed preparation needs
- April 3** ***Mon.** Continue with bed preparation, planning and planting.
Read Jeavons, Chapter 3
- Wed. Lecture. History of agriculture: domestication, dependence, depletion. Production, supply, trade, carrying capacity
- April 10** Mon. **Topic for research paper due**
Introduction to issues of local and global agriculture
Read Chapter 4 of Jeavons
- Wed. Energy budgets in Agriculture, what is sustainable?
Technology versus tradition, Amish as a case study
- April 17** ***Mon** Experience weeds as edible foods, learning to identify them
Making compost, bed maintenance
Perennial crops, “permaculture”
- Wed. **Outline of paper due, with list of sources**
First exam, 9-10:00
Global economics of food production, Politics of Food
Read Jeavons 5 and 6 and Michael Pollan article

- April 24** Mon Feeding 6 billion, and the expected 9 billion
Plant versus animal based diets
Staple crops of the world
- Wed. Nitrogen cycle, critical nutrient for agriculture,
Legumes; soy milk, tofu, beans, humus, etc.
- May 1** ***Mon.** Garden bed maintenance, discussion of fiber crops, crops for fuel,
“farmaceuticals”
- Wed. **Second exam**
Genetically Modified Food, environmental and safety issues
Does it fit into a sustainable future?
- May 8** Mon . Lecture; National Organic Standards, Organic versus synthetic pest
and disease controls, what are the options? Is Organic sustainable
by definition?
- * **Wed.** Garden maintenance, pest and disease identification
- May 15** Mon. Field trip to local organic farm
- Wed Student presentations of research topics
- May 22** Mon. Student presentations of research topics
- * **Wed.** Student presentations
Hand in research term paper
- May 29** **Mon. Memorial Day, no class**
- * **Wed.** Garden presentations to class,
- Final Exam** Wednesday, June 7, at 10:10 a.m.