Louisiana State University
College of Agriculture
School of Plant, Environmental, and Soil Sciences
Horticulture 4083
Fall 2008

Course Title and Description: **Principles and Practices in Olericulture** (4)

Instructor: Dr. Carl E. Motsenbocker
225B J.C. Miller Hall
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Community Partner: Mr. Fahmee Sabree, Islamic Complex, 740 E. Washington Street, Baton Rouge, LA 70802

Office Hours: From 11 to noon on Monday and Wednesday, and by appointment.

Prerequisites: AGRO 2051, HORT 2050 or equivalent

Textbook: Producing Vegetable Crops. 2002. J.M. Swiader and G.W. Ware. Interstate Publishers, Danville, Il.

Course Designation: This is a service-learning course.

Course Objectives:

Upon completion of this course students should:

1. Be able to demonstrate proficiency in the cultural and management considerations of successful vegetable crops production and knowledge of the commercial vegetable industry.

2. Have a better appreciation of yourself and the learning process as well as why you chose horticulture as a profession.

3. Demonstrate an understanding of the community food needs of the Baton Rouge community and how to apply one's professional skills for the betterment of society.

4. Demonstrate to others the significance of service-learning by a presentation and journal, and how it affects you as a person and as a LSU student.

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Course Format (4 credits):

Lecture Schedule (3 hrs per week)
Tuesday, Thursday 9:10 - 10:30 119 J.C. Miller Hall
Laboratory Schedule (3 hrs per week)
Tuesday 1:40 - 4:30 Hill Farm Teaching Facility (unless otherwise noted)

Field Trips
Two to three field trips will be organized from the following:

1. Farmers' Market (Saturday)
2 Small-medium scale vegetable producer
3. Mushroom producer

Labs

This semester a significant aspect of the lab is the establishment, maintenance, and harvest of herbs and vegetables in a field setting. Field plots at the Horticulture Hill Farm Teaching Facility and Burden Center will be maintained throughout the semester by vegetable crops students. The harvested produce will be provided to the Old South Baton Rogue Farmers Market on Washington, Street (under the auspices of the Islamic Complex). McKinley High School students, who previously participated in the Summer Experience urban agriculture program, will be selling the vegetables on a weekly basis.

It is expected that each student will participate in a service project off campus twice during the semester for at least 3 hours each time. The service project will be related to the farmers market and/or community food programs in the neighborhood. Each student will develop their own service project during the first part of the semester.

Specific labs:

1. Vegetable field production at the Hill Farm/Burden Center
2. Transplant mechanical conditioning
3. Seed priming and germination

The course will be taught with the teaching software Moodle. The course materials ie. syllabus, PowerPoint notes, additional reference materials, class assignments will be available on Moodle at the PAWS website.

******* STUDENT EVALUATION *******

Grading is based on a combination of:

First exam	15 %
Midterm exam	20 %
Third exam	15 %
Final exam	20 %
Oral and written semester project	5 %
Written field trip reports	5 %
Directed reflection essays	10 %
Labs and quizzes	5 %
TOTAL	100 %

Graduate students will be graded more rigorously, with the possibility of extra exam questions and assignments, to provide an educational environment that is equally challenging to all students.

Service-Learning

This is a service-learning course. This semester, service projects will be conducted in the Old South Baton Rouge neighborhood related to community food programs (in addition to the production of herbs/vegetables during lab). Service-learning is a method of teaching and learning in which students fulfill the learning goals of their academic courses while serving the community. Service-learning, as a method of teaching and learning, emphasizes hands-on experiences that address real world concerns as a venue for educational growth. For more information on service-learning: http://appl003.lsu.edu/slas/ccell/ccell.nsf/index

Reflection

Reflection is an important part of service-learning. Service-learning is a course-based credit bearing educational experience in which students ….1) participate in an organized service activity that meets identified community needs and, 2) reflect on the service activity in such a way as to gain further

understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility." (Bringle and Hatcher, 1999)

In this class, formal reflection will take place in several ways:
1. In class discussion: periodic sessions throughout the semester will allow students an opportunity to share experiences with others in the class.
2. Directed reflection essays: 3 times during the semester each student will be required to submit a 2 to 3 page essay on which you reflect on your experience. The essays will be based on guided questions that relate your experiences with the course content, and how these fit together. Please note that these essays will be considered PUBLIC; you should be aware to not use identifying information.
3. End of semester presentations: each student will be required to present their class project along with a section on their service-learning activities. This will be a 10 to 15 minute PowerPoint presentation.

GRADING:

A $\geq$ 90 %
B $\geq$ 80 % and < 90 %
C $\geq$ 70 % and < 80 %
D $\geq$ 60 % and < 70 %
F < 60 %
I Excessive nonattendance of lecture and/or laboratory.

All students are expected to attend class lectures and labs. Please notify the instructor in advance if you have an excused absence.

POLICIES:

Exams: The lecture exams cover both lecture and laboratory material. There will be no make-up exams given. You may be excused from an exam (except the final) for a legitimate reason (illness, family crisis) but you will need to verify your excuse with a note from a doctor or from your faculty advisor. A phone call in advance of a missed exam would be appreciated. An unexcused absence from an exam results in a zero grade for that exam.

Attendance: You are responsible for your own learning in this class. Attendance to both lecture and laboratory is very important; frequent in-class and lab activities count toward your participation grade.

Academic dishonesty: Academic dishonesty can result in probation, suspension, or expulsion. For more information refer to the Louisiana State University Handbook.

HORT 4083 Tentative Course Outline (Fall 2008)

Day	Date	Topic	Source
T	8/26	Course Overview, Student profile, LA & U.S. Veg. Industry	
T	8/26	*Lab*: Start transplant lab; field direct seeding and transplanting	
TH	8/28	World pop, land area, food situation; vegetable origin, evolution, & classif.	Ch 1, 2, 3
M	9/1	**LABOR DAY HOLIDAY**	
T	9/2	Vegetables and nutrition, toxic substances	Ch4/5, Handouts
T	9/4	*Lab*: continue field lab	
TH	9/4	Vegetables and nutrition, toxic substances contd.	Handouts
T	9/9	Crop Establishment-transplanting & direct seeding; Class Project	Ch 5
T	9/9	*Lab* - start brushing transplants	
TH	9/11	Soil Management and Fertilization	Ch 6
T	9/16	Pest Management (weeds, insects, disease)	Ch 7, 9
T	9/16	*Lab* – Transplanting in the field, pest management	
TH	9/18	**FIRST EXAM**	
T	9/23	Irrigation and Mulching (modification of the plant environment)	Ch 8
T	9/23	*Lab* - Harvest field plots	
TH	9/25	Sustainable Agriculture	Handouts
T	9/30	Greenhouse vegetables	Ch 29
T	9/30	*Lab* – Harvest field plots,	
TH	10/2	Greenhouse vegetables contd. **First Service-Learning Report Due**	
T	10/7	Root and tuberous crops: Sweet potato.	Ch 26
T	10/7	*Lab* - Harvest field plots	
TH/F	10/9	**FALL HOLIDAY**	
T	10/14	Root and tuberous crops: Irish potato	Ch 23
T	10/14	*Lab* - Harvest field plots	
TH	10/16	**MIDTERM EXAM**	
T	10/21	Solanaceous crops: pepper	Ch 22
T	10/21	*Field trip*: Greenhouse vegetables	
TH	10/23	Tomato	Ch 27
T	10/28	Solanaceous crops: tomato, pepper contd.	Ch 23
T	10/28	*Lab* – Harvest field plots	
TH	10/30	Sweet corn & growing degree days	Ch 25
T	11/4	Biotechnology and Genetic Engineering	Ch 11

T	11/4	*Lab*: Processing Vegetables Decision Case Study, harvest field plots	
TH	11/6	**THIRD EXAM Second Service-Learning Report Due**	
T	11/11	Mushrooms, Dr. Tom Koske, LCES	Handouts
T	11/11	*Lab:* Processing Vegetables Decision Case Study	
TH	11/13	Allium species	Ch 20
F	**11/14**	**Class Projects Due**	
T	11/18	Cole crops	Ch 14
T	11/18	*Lab* – TBA Field Trip	
TH	11/20	Direct Marketing – Farmers Markets	Handouts
T	11/25	Community Food Programs	Handouts
T	11/25	*Lab:* Harvest vegetables	
TH-F	11/27-28	**THANKSGIVING HOLIDAY**	
T	11/25	Student led discussion of class project	One page handouts
T	11/25	*Lab:* Student led discussion of class project contd.	One page handouts
TH	11/27	Pest management – insects (Guest lecturer)	
T	12/2	Marketing – guest lecturer	
T	12/2	*Lab TBA*	
TH	12/4	The Future of Food	
T	12/12	**FINAL EXAM (10 am to noon) Third Service-Learning Report Due**	