## HOS 4932 Syllabus Field Laboratory for Innovative Vegetable Production

(Spring 2016, 2 credits)
Prereq: HOS3020, HOS3281C, or HOS3222C or VEC3221C or equivalent

## **INSTRUCTORS:**

Bala Rathinasabapathi, Ph.D. Xin Zhao, Ph.D. 2247 Fifield Hall 1235 Fifield Hall 352-273-4847 352-273-4773 brath@ufl.edu zxin@ufl.edu

#### **CLASS MEETING TIMES AND LOCATION:**

Wednesday, Period 9, 4:05-4:55 pm, 2316 Fifield Hall Friday, Period 8, 3:00-3:50 pm, 2316 Fifield Hall

**OFFICE HOURS:** By Appointment. Students can email either instructor to make an appointment as needed.

<u>COURSE DESCRIPTION:</u> This course provides a hands-on learning environment for students to develop ideas on creating and examining innovative production practices, techniques, and systems toward improving vegetable crop productivity, health, and quality. Students will conduct demonstration projects to evaluate proposed treatments and solutions for problems in vegetable crop production or carry out research experiments to test scientific hypotheses.

## **LEARNING OBJECTIVES:** Upon successful completion of this course, students will be able to:

- (1) Identify a critical problem or need in vegetable production based on information gathered about the production of one specific vegetable crop grown in Florida.
- (2) Design and articulate solutions to solve the problem(s) or meet the need(s).
- (3) Test the most convincing solutions to solve the problem in a field experiment during Spring production.
- (4) Develop communication skills by describing and disseminating observations and experimental results in writing and oral presentations.

**<u>CLASS FORMAT:</u>** Guided and brainstorming discussions, demonstrations, videos, greenhouse, field, and lab activities, and individual projects.

<u>**TEXT:**</u> There are no required textbooks for this course. Book chapters, journal articles, websites, videos, and other materials will be collectively used. Canvas (<a href="https://lss.at.ufl.edu/">https://lss.at.ufl.edu/</a>) is used to post course materials and grades.

**ATTENDANCE AND CLASS PARTICIPATION:** Students are required to be present for every class. If you will have to miss a class due to an emergency, please notify the course instructors or TA as soon as possible. Class attendance and participation is counted in the final grade. If you are absent, it is your responsibility to make up for the work you missed.

#### **GRADING:**

Mid-term evaluation of each project will be conducted by students in the middle of the semester. Peer evaluation will be performed toward the end of the semester. The purpose of evaluation is to help monitor the project progress and promote critical thinking to make the project outcomes better.

Activity	Points possible
Attendance and participation	100
Project proposal	100
Project implementation	200
Mid-term evaluation	50
Peer evaluation	50
Oral presentation	100
Written report	100
Project video	100

Total points = 800

A
A-
B+
В
B-
C+
C
C-
D+
D
D-
E

For information on current UF policies for assigning grade points, see: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

**SERVICES FOR STUDENTS WITH DISABILITIES:** The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

**ACADEMIC HONESTY:** As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is

either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <a href="http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php">http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php</a>.

If you are not sure what constitutes **plagiarism**, please ask your instructor to clarify before starting your project. It is to be assumed that all work will be completed independently unless the assignment is defined as group project, in writing by the instructor. The policy will be vigorously upheld at all times in this course.

**Plagiarism Detection:** The <u>Turnitin</u> service will be used to identify student submissions that contain unoriginal material. Your written assignments may be submitted to Turnitin for plagiarism detection and for no other purpose.

**STATEMENT APPEARING ON EXAMS:** The following statement can be expected to appear on exams, followed by a space for the student's signature – "On my honor, I have neither given nor received unauthorized aid on this examination."

<u>UF COUNSELING SERVICES:</u> Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

 University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/

> Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Training Programs Community Provider Database

• Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

**SOFTWARE USE:** All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

# **Tentative Schedule**

Week	Date	Day	Topics	Notes
1	6 Jan	W	Course introduction and syllabus	
	8 Jan	F	End products of intellectual efforts	Life cycle of IP, publications, prototypes, patents, trademarks
2	13 Jan	W	Examples of innovations in veg production	Novelty, usefulness, marketing, start-ups, public acceptance
	15 Jan	F	Specific project ideas from students	Brainstorming and discussions
3	20 Jan	W	Discussions on project ideas from students	Project planning: Available resources, time-frame & goal setting
	22 Jan	F	Field preparation and transplant production	Greenhouse and field work
4	27 Jan	W	Hands-on work on the project	Some of these will be at the labs, greenhouse & field
	29 Jan	F	Hands-on work on the project	Some of these will be at the labs, greenhouse & field
	3 Feb	W	Documenting qualitative observations	Examples on this will be presented by instructors
5	5 Feb	F	Documenting quantitative data	Principles of replication, randomization and error analysis
6	10 Feb	W	Experimental design, treatment structure, and statistical analysis of quantitative data	ANOVA and mean separation tests
	12 Feb	F	Hands-on work on the project	Some of these will be at the labs, greenhouse & field
7	17 Feb	W	Hands-on work on the project	Some of these will be at the labs, greenhouse & field
/	19 Feb	F	Hands-on work on the project	Some of these will be at the labs, greenhouse & field
8	24 Feb	W	Mid-term evaluation of projects	Bring your portfolio of activities on the project for discussion
8	26 Feb	F	Mid-term evaluation of projects	Bring your portfolio of activities on the project for discussion
9	2 Mar	W	Spring Break	No class meeting
9	4 Mar	F	Spring Break	No class meeting
	9 Mar	W	Discussion on mid-term evaluations	Instructor feedback to students
10	11 Mar	F	Project completion	Data collection, repetitions if needed, photographs & videos
11	16 Mar	W	Project completion	Data collection, repetitions if needed, photographs & videos
11	18 Mar	F	Project completion	Data collection, repetitions if needed, photographs & videos
12	23 Mar	W	Project completion	Data collection, repetitions if needed, photographs & videos
12	25 Mar	F	Project completion	Data collection, repetitions if needed, photographs & videos
13	30 Mar	W	Project completion	Data collection, repetitions if needed, photographs & videos
	1 Apr	F	Preparation of reports and videos by students	Tips for the prep of reports and videos
14	6 Apr	W	Preparation of reports and videos by students	Tips for the prep of reports and videos
	8 Apr	F	Project presentation and peer evaluation	presentation of the project and the videos
15	13 Apr	W	Project presentation and peer evaluation	presentation of the project and the videos
	15 Apr	F	Project presentation and peer evaluation	presentation of the project and the videos
16	20 Apr	W	Project presentation and peer evaluation	Instructor feedback on specific projects & future plans