University of Florida

Every year, Fall, Spring and Summer
Horticultural Sciences Department

HOS 4905 Independent Study

Class Number and Section Number – varies by instructor

Format: Supervised projects for 1-6 credits
Schedule: Variable. Approximately 1 credit hour equals one hour of classroom time or 3 h of project-related activities per week.
Location: Fifield Hall or associated building.
Pre-requisite: Instructor consent.

Course Description:

This course is designed for undergraduate students to take up a semester-long project related to horticultural research, extension or education. Students work under the direction of the instructor(s) either singly or in groups to accomplish specific goals.

Course Objectives:

At the completion of this course, the students are expected to have accomplished specific goals of the project or made significant progress toward accomplishing the goals. While the details of the projects could vary the following are some of the general expectations:
(a) The student has understood the need of the project or the hypothesis to be tested using the scientific method. (b) The student has learned required skills needed to solve the problem(s), (c) The student has done background reading for the project, (d) The student communicated to the instructor both the on-going progress of the project and the final outcomes both orally and in writing.

Instructor: Staff
Office Hours: By appointment

Resources:

There is no required textbook for this course.
Some of the online resources for projects can be found in these websites:
Center for Undergraduate Research, University of Florida https://cur.aa.ufl.edu/
University of Florida Library https://cms.uflib.ufl.edu/msl/Index.aspx

Reading List

The instructor will provide the most pertinent publications related to the project.

Internet Homepage for the Course Individual instructors may use "Canvas" or e mails to share files with the student. Please ask your instructor about this.

Course Outline:
In this course the students are given projects with specific goals achievable within the semester. Student needs to communicate with the instructor (a semester before when the student plans to do the project or during the first week of the semester). During the one-on-one meeting the student by discussing with the instructor will understand the background ideas for the project, specific objectives of the individual study, and resources needed to accomplish the objectives. Based on those the student will develop a plan of action and seek input from the instructor.

Possible projects are briefly described below:

(a) *Hands on Scientific research*. The student will use the scientific method to pose a question and answer that question using one or more controlled experiments. The controlled experiments may involve laboratory work, greenhouse work or field work. Discuss with your instructor to come up with a research project.
(b) *Computer-based research.* In these projects, the student may do all or part of the research using a computer. For example, a student can pose and answer questions using library research of previously published research and may arrive at a novel conclusion. The student may explore new computational tools such as machine learning or AI tools to solve a scientific or crop production problem related to horticulture or plant biology.
(c) *Demonstration projects.* The student may build an apparatus or a crop growing system to demonstrate the value of a particular set up. Examples for this type of projects include building raised bed gardens or making special hydroponic systems or testing the productivity of different varieties of a vegetable.
(d) *Extension projects.* The students will collect and organize previously available information on a research topic and formulate/collate those in such a way that it will be directly useful for farmers. An example for such a project is the preparation of a website or a blog post with resources for growing a particular crop under Florida conditions.
(e) *Community projects.* The student will work with a local community organization to develop a project that benefits the local community, the department and the University of Florida. An example for such a project would be a student helping a middle school teacher to develop a vegetable garden at the school.

Student Presentation: Students are required to make a 30 minute presentation on their project to the instructor. Grading will be based on (a) communication of the main idea (b) explanation of the methods used, (c) critical analysis of the plan and activities and (d) clarity of delivery.

Written Assignment: Students should write a final report within 5 pages (double or single-spaced, including references) on your project. Please include (a) statement of objectives of the project, (b) methods and procedures followed, (c) results of the project,

(d) ideas for improvement and future directions and (e) references. Make sure to share pertinent photographs from your project in this report.

Course Evaluation

Student communicating progress each week	50 points
Written assignment	75 points
Student presentation	75 points
TOTAL	200 points

Letter grades for the course will be assigned according to the chart below:
90-100 = A; 87-89 = A-; 84-86 = B+; 80-83 = B; 77-79 = B-; 74-76 = C+;
70-73 = C; 67-69 = C-; 64-66 = D+; 60-63 = D; 57-59 = D-; 56-below = E.

Course Policies and Procedures

1. Attendance: Attendance is key, but unlike attending routine classes, here the student and the instructor should make a plan to meet routinely so that problems can be discussed. The student should be available when the project goals would need student's attention. For example, if a student is growing some plants for the project, it is the student's responsibility to check on them every few days once or arrange someone so that the plant is protected.

2. Student safety: Students are expected to follow all safety guidelines while working on the project. Depending upon the project, the student may have to undergo training prior to beginning the project. Safety may be related to handling biological, chemical or physical material in the lab or pesticide safety or operation of mechanical instruments in the garden. Safety guidelines for laboratory safety can be found here: http://www.ehs.ufl.edu/

3. Homework Policy: Discuss with your instructor in advance if you need flexibility about when you will submit your work. The student and the instructor will choose a mutually agreed date for the student presentation and for the submission of the final report. Please seek input on your draft report prior to submitting a final report for grading.

4. Honor Code: By registering for classes, all students agree to abide by and follow the University of Florida Student Honor Code (Rule 6C1-4.017). Visit: https://policy.ufl.edu/regulation/4-040/ to read the Student Honor Code. Honor

code violations in this course will not be tolerated, and may result in the assignment of a failing grade.

5. UF Counseling Services:
   Counseling & Wellness Center, 301 Peabody Hall, 392-1575, personal and career counseling. http://www.counseling.ufl.edu
   Student Health Care Center, 392-1161, personal counseling. http://shcc.ufl.edu/Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling. http://www.crc.ufl.edu/

6. Software Use: Everyone is required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages/criminal penalties for the violator.

7. Electronic Device Policy: The use by students of cellular phones, messaging devices and other electronic devices during lectures is prohibited. In class, the students are asked to put the phones and messaging devices on silent mode and turn off other devices.

8. Students with Disabilities Act. The Dean of Students Office coordinates the needed accommodations of students with disabilities. To register contact: Dean of Students Office, 202 Peabody Hall, 392-7066, www.dso.ufl.edu