

Course requirements for the PhD degree in HCS - 2021

All PhD students in HCS are required to complete a curriculum of courses that encompass crop physiology, ecology, plant breeding and biotechnology, and experimental design. Graduate students may be required to take additional specialized courses as directed by their Student Advisory Committee (SAC).

	Course	Course Title and Information	Credits
1	HCS 5621 OR	Physiology of Cultivated Plants (Au)	3
	HCS 7821	Environmental Physiology of Managed Plant Systems (Sp)	3
2	HCS 7625 OR	Plant Breeding and Biotechnology (Au)	3
	HCS 8825	Advanced Plant Breeding (Summer)	3
3	HCS 5602	Ecology of Agriculture (Sp)	3
4	HCS 8887	Techniques of Experimental Design (Sp)	4
5	HCS 7001	Graduate Student Professional Development (Au) New of incoming Graduate Students take this the first semester of enrollment.	1
6	HCS 7890	Seminar on HCS Topics (Colloquium within first 2 semesters)	1
	HCS 7890	Seminar on HCS Topics (register at least one more time)	1
7	HCS 7806	Research Methods in HCS	1-2
	HCS 7806	Research Methods in HCS	1-2
8	HCS 8830	Current Topics	1
	HCS 8830	Current Topics	1
	HCS 8830 or other	Current Topics	1
9	HCS 8999	Research (1-12 cr/term)	Var.
10	HCS or other	Electives (9 additional hrs.) HCS or other courses at the 5000 level or above (does not include courses that fulfill above requirements, i.e. HCS 8999, 8830, 7806, 7890, 7001)	9+
11	HCS or other	Advanced course requirement: 2 courses listed above in 1, 2 or 10 must be at the 7000 or 8000 level.	

12		Other coursework required by SAC	
13		Submission of publication to a peer-reviewed journal	

Professional Development: Graduate Student Professional Development (HCS 7001 1 cr) is to be taken the first autumn semester

Colloquium and Seminar requirement: (HCS 7890 1 cr repeatable). Students will enroll in HCS 7890 a minimum of two times: The first of these should occur by the second semester of enrollment, during which the student will present a Colloquium describing his or her research proposal. The second and subsequent enrollments can be any semester thereafter.

Methods in Horticulture and Crop Science: (HCS 7806 1-2 cr, repeatable). Doctoral students are required to take at least two 7806 courses. Students are encouraged to work with faculty to suggest topics of interest.

Current Topics in Horticulture and Crop Science: (HCS 8830 1 cr, repeatable). Doctoral students must register for a minimum of 3 times. These courses generally have a 'journal club' format in which students and faculty discuss current papers in the field.

Research requirement: (HCS 8999 1-12 cr, repeatable). Students undertake innovative, timely research projects as a major component of the total graduate program. Enrollment in HCS 8999 (Research) provides credit for the research experience. Research Proposals are considered HCS 8999 activity and they should be submitted to the GSC by the end of the third semester of enrollment for Ph.D. students.

Exit Seminar requirement: All students will present an Exit Seminar on the day of their final defense, just prior to the actual defense. This is a culminating event in the academic career of a student and their association with this Department. The student will be responsible for scheduling and notifying the department, SAC members, and associated units, of the time and place of their exit seminar presentation. Exit seminars will be video-linked between campuses. The exit seminar will be 50 minutes in duration to provide presentations that are thorough, with ample time for discussion; however, the exit seminar is not part of the final exam and should not take time from the examination.

Submission of Publication Requirement: All students will submit a publication to a peer-reviewed journal.