

Proposal to the Senate Educational Policy Committee

- PROPOSAL TITLE: Proposal to Revise the Ph.D. in Crop Sciences, Department of Crop Sciences, College of Agricultural, Consumer and Environmental Sciences.
- SPONSOR: Dr. John A. Juvik, Professor of Plant Genetics, Director of Graduate Studies, Department of Crop Sciences, 333-1966, juvik@illinois.edu.
- **COLLEGE CONTACT**: Dr. Laurie Kramer, Associate Dean for Academic Programs, College of ACES, 333-3380, lfkramer@illinois.edu.
- **BRIEF DESCRIPTION:** We propose changing requirements for the Ph.D. in Crop Sciences for graduate students with an M.S. degree from 32 hours of thesis research and 32 hours of coursework to a minimum of 12 hours of graded coursework, one hour of CPSC 593 (orientation, unless already completed in the M.S. program in Crop Sciences), a maximum of 14 hours of CPSC 598 (seminar)¹ and a minimum of 37 hours of CPSC or PLPA 599 (thesis research) to total 64 or more hours. For Ph.D. graduate students entering with a B.S. or B.A. degree, we propose changing requirements for the Ph.D. in Crop Sciences from 32 hours of thesis research and 64 hours of coursework to 32 hours of graded coursework, one hour of CPSC 593 (orientation), a maximum of 14 hours of CPSC 598 (seminar)¹, and CPSC or PLPA 599 (thesis research) to total a minimum of 296 hours.

¹ Graduate students are required each semester to enroll in either our Wednesday or Thursday seminar series for one hour of credit (satisfactory/unsatisfactory). Students entering with a B.A., B.S. or M.S. degree will complete their programs in less than seven years, therefore we have assigned a maximum of 14 hours of CPSC 598.

JUSTIFICATION: The Crop Sciences Ph.D. is an interdisciplinary program where the education of the student is centered in the laboratory of the advisor.

The impetus for this proposed change was initiated when it became evident that many doctoral students in certain areas of emphasis within the department were being required to complete classwork outside their areas of specialization and interest. Representatives of the Crop Sciences Graduate Student Organization have approached the Department Head and the departmental Graduate Studies committee with requests to consider reducing the number of required graded credit hours. A number of students were taking CPSC 593: Advanced Studies in Crop Sciences, independent study hours to meet the existing requirement of 32 hours of non-thesis credit. The Crop Sciences faculty decided that instead of requiring students to take courses outside of their areas of required training or engage in unrequired independent special problem hours, the department should decrease the number of required graded non-thesis credit hours. This revision was discussed and recommended for approval by the Crop Sciences Graduate Studies Committee, the Department Advisory Committee, and at a department faculty meeting. Finally, the revision was voted on by the entire faculty in an online secret ballot with 27 faculty (79%) in favor of the revision and 7 (21%) opposed.

As a part of the process of deciding on what the requirements should be, the Crop Sciences Graduate Studies Committee examined programs in similar areas on Campus and at comparable institutions. The committee discovered that the 32 graded credit hour requirement was substantially out of line with comparable programs at other institutions and with many of those here on campus. (See comparisons in Appendix A.) The agreement among Crop Sciences faculty was that doctoral requirements be revised to allow advisors and graduate guidance committees to shape the plan of study to meet expectations of the student's discipline and enhance their competitiveness for career opportunities.

To ensure that doctoral students develop broader skills and knowledge beyond their work with their advisor, Crop Sciences offers the following:

- All Crop Sciences graduate students are required to take CPSC 594: Graduate Student Professional Orientation during the first semester or second semester in residence; this online course includes a series of teaching modules and exercises that familiarizes students with University online resources, professional ethics, the Crop Sciences graduate program, and requires the students to provide a plan of study, identify committee members, and generate a preliminary research proposal. We have instituted a requirement for students in this class to submit a plan of study listing all the courses they will take to complete their degree requirements and signed by their advisor and committee members. The student's advisor and their graduate committee will dictate the number of graded courses required in their Ph.D. program. This course is offered with Satisfactory/Unsatisfactory grading and cannot count toward the new 12 (doctoral students entering with a M.S.) or 32 (doctoral students entering with a B.A. or B.S.) hour graded coursework requirement.
- Our students meet with their graduate guidance committees annually to have their activities and progress reviewed.
- Each graduate student is reviewed annually by our Director of Graduate Studies or an alternate, who is external to the student's advisory committee.
- Our two weekly seminar series (CPSC 598) are offered each semester and host speakers from the industry, other academic institutions, NGOs, and

graduate student presentations. Graduate students are required to register for one of these seminar series each semester and receive one hour of satisfactory/unsatisfactory credit, which does not count toward the graded hour requirement each semester of enrollment. We feel this requirement familiarizes our students with the diversity and opportunity to integrate knowledge across the disciplines within the area of plant sciences.

BUDGETARY AND STAFF IMPLICATIONS: (Please respond to each of the

following questions.)

1) Resources

- a. How does the unit intend to financially support this proposal? No impact is anticipated on staffing or funding. The reduction in graded hours is partially compensated for by requiring all Ph.D. students to take CPSC 598 seminar each semester for the duration of their programs. This will account for between 8-14 additional required credit hours. This change does not require any financial support. Another anticipated change will be a shift in the number of CPSC 593 graded hours into other graded courses or into CPSC or PLPA 599.
- b. How will the unit create capacity or surplus to appropriately resource this program? If applicable, what functions or programs will the unit no longer support to create capacity? No additional resources are required. As stated earlier, we anticipate most students will be adding required seminar credits and potentially more thesis research. Our students are already engaged in this thesis research. The only change will be that they will enroll for credit for the work they are already doing.
- c. Will the unit need to seek campus or other external resources? If so, please provide a summary of the sources and an indication of the approved support. No campus or external resources are needed.
- d. Please provide a letter of acknowledgment from the college that outlines the financial arrangements for the proposed program. None requested.
- 2) Resource Implications
 - a. Please address the impact on faculty resources including the changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. While this represents a reduction in the required number of hours of graded coursework we anticipate this will not significantly change teaching loads, student-faculty ratios, etc. We acknowledge that some courses will see decreases in enrollment, but if students are taking them to fulfill a requirement instead of needing graded hours, this is an acceptable outcome. The major change will come in the reduction in the number of hours that students register for CPSC 593: Independent study and an increase in CPSC 598 due to the requirement for students to register for seminar each semester. Faculty advisory committees will continue to insure that each student will receive education in the disciplines/courses central to their preparation and competitiveness for career opportunities.

- b. Please address the impact on course enrollment in other units and provide an explanation of discussions with representatives of those units. (A letter of acknowledgement from units impacted should be included.) No impact on other units.
- c. Please address the impact on the University Library (A letter of estimated impact from the University Librarian must be included for all new program proposals. If the impact is above and beyond normal library business practices, describe provisions for how this will be resourced.) No impact.
- d. Please address the impact on technology and space (e.g. computer use, laboratory use, equipment, etc.). No impact.

DESIRED EFFECTIVE DATE: Fall, 2016

STATEMENT FOR PROGRAMS OF STUDY CATALOG: The revised Program of Study Catalog entry is shown below. Details of the proposed revisions compared to the current Curricula are detailed in Appendix B. There are no other changes.

Doctor of Philosophy in Crop Sciences

Students are required to pass a preliminary examination within five semesters of first enrolling, not including the summer terms, and after substantial completion of the Ph.D. graded coursework requirement. The preliminary examination is comprised of both an oral and written component and students are expected to defend their Thesis Proposal at the oral component of the examination. Those students on the BA to Ph.D. plan must also pass a Qualifying Exam. An acceptable dissertation is required. Residence requirements are the same as those of the Graduate College.

Entering with approved M.S./M.A. degree

Minimum Graded Coursework approved by the graduate guidance committee		
not including CPSC 594 or CPSC 598, with a grade point average of at least a		
В.		
CPSC 594: Graduate Student Professional Orientation (CPSC 594 is not		
required if it was taken in fulfillment of the master's degree.)	0 or 1	
CPSC 598: Graduate Student Seminar (enrollment required each semester)		
<u>CPSC/PLPA 599</u> Thesis Research (min. applied toward degree)	37	
Total Hours	64	

Other Requirements¹

Other requirements and conditions may overlap	
64 hours of in-residence credit hours beyond the M.S.	
Qualifying Exam Required:	INo
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes

¹ For additional details and requirements refer to the department's <u>graduate handbook</u> and the <u>Graduate College Handbook</u>.

Entering with approved B.S./B.A. degree

Minimum Graded Coursework approved by the graduate guidance	
committee not including CPSC 594 or CPSC 598, with a grade point	
average of at least a B.	32
CPSC 594: Graduate Student Professional Orientation	1
CPSC 598: Graduate Student Seminar (enrollment required each	-
semester)	Max. 14
<u>CPSC/PLPA 599</u> Thesis Research (min. applied toward degree)	49
Total Hours	96

Other Requirements¹

Other requirements and conditions may overlap	
64 hours of in-residence credit beyond the M.S.	
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

¹ For additional details and requirements refer to the department's <u>graduate handbook</u> and the <u>Graduate College Handbook</u>. CLEARANCES: (Clearances should include signatures and dates of approval. These signatures must appear on a separate sheet. If multiple departments or colleges are sponsoring the proposal, please add the appropriate signature lines below.)

Signatures:

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Unit Representative:

12/01/2015 Date:

c Kramer College Representative:

Graduate College Representative:

4-5-16

Date:

4-14-16

Date:

Council on Teacher Education Representative:

Date:

Appendix A: Comparison to Comparable Programs

Program	Coursework Requirements	Thesis
		Hours
		Required
Proposed Revision of the Ph.D.	1. At least 12 hours of graded coursework	52
in Crop Sciences	hours (not including CPSC 593, CPSC 594,	
	and CPSC 598) for students entering with a	
	M.S. degree.	64
	2. At least 32 hours of graded coursework (not	
	including CPSC 593, CPSC 594, and CPSC	
	598) for students entering with a B.A. or B.S.	
	degree.	
UIUC Department of Natural	A minimum of 12 hours of graded coursework	52
Resources and Environmental	for students entering with a M.S. degree (does	
Sciences	not include NRES 501: Independent Study)	
UIUC Plant Biology	No requirement for graded coursework hours	64
	for students entering with a M.S. degree	
UIUC Neurosciences	No requirement for graded coursework hours	64
	for students entering with a M.S. degree	
Iowa State University Plant	15-18 hours of graded coursework depending	?
Pathology	on training during M.S. degree	
Cornell University - School of	A minimum of 8 credit hours are required for	?
Integrative Plant Science - Plant	students entering with an M.S. degree	
Breeding and Genetics		

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Appendix B: Proposed Ph.D. Curriculum Revisions

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Current Requirements		Revised Requirements	
	Current		Revised
	Hours		Hours
Entering with approved M.S./M.A. degree	22	Entering with approved M.S./M.A. degree	13
Coursework approved by the graduate guidance committee an including CPSC 594, with a grade point average of at least a B, including 16 hours outside the core specialization area are required. (CPSC 594 is not required if it was taken in fulfillment of the master's degree.)	32	Minimum Graded Coursework approved by the graduate guidance committee not including CPSC 594 or CPSC 598, with a grade point average of at least a B.	12
		CPSC 594 (CPSC 594 is not required if it was taken in fulfillment of the master's degree.)	0-1
		CPSC 598 (enrollment required each	
		semester)	Max 14
CPSC/PLPA 599 Thesis Research (min/max		CPSC/PLPA 599 Thesis Research (min applied	
applied toward degree)	32	toward degree)	37
Total Hours	64	Total Hours	64
Other Requirements ¹		Other Requirements ¹	
overlap 64 hours of in-residence credit beyond the		Other requirements and conditions may overlap	
M.S.		64 hours of in-residence credit beyond the M.S.	
Minimum 500-level Hours Required Overall:	33		
Qualifying Exam Required:	No	Qualifying Exam Required:	No
Preliminary Exam Required:	Yes	Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required: Dissertation Deposit Required: Minimum GPA: ¹ For additional details and requirements refer to the dopartment's graduate handbook	Yes Yes 3	Final Exam/Dissertation Defense Required: Dissertation Deposit Required: Minimum GPA: ¹ For additional details and requirements refer to the department's graduate bandbook	Yes Yes 3
and the Graduate College Handbook.		and the Graduate College Handbook.	

Current Requirements Entering with approved B.S./B.A. degree		Revised Requirements Entering with approved B.S./B.A. degree	
Coursework approved by the graduate guidance committee an including CPSC 594, with a grade point average of at least a B, including 16 hours outside the core specialization area are required. (CPSC 594 is not required if it was taken in fulfillment of the master's degree.)	64	Minimum Graded Coursework approved by the graduate guidance committee not including CPSC 594 or CPSC 598, with a grade point average of at least a B.	32
		CPSC 594 CPSC 598 (enrollment required each	1
		semester)	Max 14
CPSC/PLPA 599 Thesis Research (min/max		CPSC/PLPA 599 Thesis Research (min applied	
applied toward degree)	32	toward degree)	49
Total Hours	96	Total Hours	96
Other Requirements ¹ Other requirements and conditions may		Other Requirements ¹	
overlap		Other requirements and conditions may overlap	
64 hours of in-residence credit beyond the			
M.S.		64 hours of in-residence credit beyond the M.S.	
Minimum 500-level Hours Required Overall:	36		
Qualifying Exam Required:	Yes	Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes	Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes	Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes	Dissertation Deposit Required:	Yes
Minimum GPA:	3	Minimum GPA:	3
1 For additional details and		¹ For additional details and	
requirements refer to the		requirements refer to the	
department's graduate handbook		department's graduate handbook	
and the Graduate College		and the Graduate College	
Handbook.		Handbook.	

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Graduate College

204 Coble Hall 801 South Wright Street Champaign, IL 61820-6210

Executive Committee

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Members

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Kirsten Phelps Library and Information Science

Sandra Rodriguez-Zas Animal Sciences

Mark Rood Civil & Environmental Engineering

Lisa Rosenthal Art & Design

Angeliki Tzanetou Classics

Michelle Wang Statistics/Psychology/ Bioengineering



April 13, 2016

Kathy Martensen Office of the Provost 207 Swanlund MC-304

Dear Kathy,

Enclosed please find the proposal titled "Proposal to Revise the Ph.D. in Crop Sciences, Department".

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The proposal was reviewed by the Graduate College Executive Committee and the proposed program revision has been found to meet campus requirements and guidelines for graduate education.

I send the proposal to you now for further review.

Sincerely, John C. Hart

Executive Associate Dean Graduate College

c: J. Juvik L. Kramer A. McKinney

telephone 217-333-0035 • fax 217-333-8019 • url http://www.grad.illinois.edu

UNIVERSITY OF ILLINOIS AT URBANA - CHAMPAIGN

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College of Agricultural, Consumer and Environmental Sciences

Academic Programs 128 Mumford Hall, MC-710 1301 West Gregory Drive Urbana, IL 61801

April 5, 2016

Allison McKinney, Director Academic Programs, Policy and Academic Services Graduate College 204 Coble Hall Campus MC-322

Dear Allison:

I am writing to request Graduate College review for a proposal to revise the Ph.D. program in the Department of Crop Sciences. It has been reviewed and approved by the College of ACES Courses and Curricula Committee. A copy of the proposal is attached in Senate format, along with two appendices providing additional information about the proposed curricular changes.

Thank you for your consideration. I look forward to receiving your reply.

Sincerely,

Kaunie Kramen

Laurie Kramer Associate Dean ACES Academic Programs

LFK/rhc

cc: G. A. Bollero S. D. Carson J. A. Juvik F. L. Kolb CPSC C&C Binder

