

**UNIVERSITY OF KENTUCKY  
REQUEST FOR CHANGE IN MASTERS DEGREE PROGRAM**

Program: M.S. IN PLANT AND SOIL SCIENCES

Department/Division: PLANT AND SOIL SCIENCES/HORTICULTURE

College: AGRICULTURE Bulletin pp 290-292

Degree Title (Old): MS IN PLANT AND SOIL SCIENCES Major (New): MS IN INTEGRATED PLANT AND SOIL SCIENCES

CIP Code: 01.1199 HEGIS Code: \_\_\_\_\_

Accrediting Agency (if applicable): \_\_\_\_\_

**I. CHANGE(S) IN PROGRAM REQUIREMENTS**

	<u>Current</u>	<u>Proposed</u>
1. Number of transfer credits allowed (Graduate School limit: 9 hours or 25% of coursework)	9	9
2. Residence requirement (if applicable)	NA	NA
3. Language(s) and/or skill(s) required	NA	NA
4. Termination criteria	UNSATISFACTORY PROGRESS	UNSATISFACTORY PROGRESS
5. Plan A requirements*	24 GRADUATE CREDIT HOURS 12 HOURS AT 600+ EXIT SEMINAR	24 GRADUATE CREDIT HOURS 12 HOURS AT 600+ EXIT SEMINAR
6. Plan B requirements*	30 GRADUATE CREDIT HOURS 15 HOURS AT 600+	30 GRADUATE CREDIT HOURS 15 HOURS AT 600+
7. Distribution of course levels required (At least one half must be at 600+ level & two thirds must be in organized courses)	12 HOURS AT 600+ 16 HOURS IN ORGANIZED COURSES	12 HOURS AT 600+ 16 HOURS IN ORGANIZED COURSES

8. Required courses (if applicable)	NA	IPS 610 – 1 CREDIT
		IPS 625 – 2 CREDIT
		PLS 772 – 1 CREDIT
9. Required distribution of courses within program (if applicable)	DISCIPLINARY CORE (6–9)	PROGRAM CORE (4)
	BASIC RESEARCH(4-6)	GRADUATE STATISTICS (3-4)
	SPECIALIZATION (9-14)	SPECIALIZATION (16-17)
10. Final examination requirements	ORAL DEFENSE	ORAL DEFENSE
11. Any other requirements not covered above		

**II. RATIONALE FOR CHANGE(S)**

If the rationale involves accreditation requirements, please include specific references to those requirements.

Graduate students in plant and soil sciences and horticulture come from diverse backgrounds with diverse interest. The existing rigid core structure of the program is an impediment to students who arrive with significant prior experience or who have specific career objectives. The revised program maximizes the flexibility of coursework to which students may be exposed, yet provides key common skills in required courses. The exposure of all students in the IPS program to the value of interdisciplinary approaches to problem solving as well as the merits of cross-disciplinary education will serve as a cohesive tool for generating mutual respect and admiration among IPS students, and help them develop more creative approaches to problem solving in their own research programs. This goal is accomplished by two new IPSS courses (IPS 610, IPS 625). The program also retains a basic requirement for experience in presenting seminars and graduate level statistics as a prerequisite of MS level students to have experience with data collection, interpretation, and analysis.

\* If there is only one plan for the degree, plans involving a thesis (or the equivalent in studio work, etc.) should be discussed under Plan A and those not involving a thesis should be discussed under Plan B.

NOTE: To the extent that proposed changes in 5, 6 or 8 above involve the addition of courses in other programs, please submit correspondence from the other program(s) pertaining to the availability of such courses to your students.

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**Signatures of Approval:**

Horticulture - 01/15/10  
 Plant and Soil Sciences – 01/22/10

*Robert L. Harty*      *Indal Pfeiffer*

\_\_\_\_\_  
 Date of Approval by Department Faculty

\_\_\_\_\_  
 Reported by Department Chair

\_\_\_\_\_  
 Graduate Curriculum Committee—03/05/10

\_\_\_\_\_  
*Larry J. Grabau*

\_\_\_\_\_  
 Date of Approval by College Faculty

\_\_\_\_\_  
 Reported by College Dean

\_\_\_\_\_  
 \*Date of Approval by Undergraduate Council

\_\_\_\_\_  
 Reported by Undergraduate Council Chair

**Received from GC 7/9/10**

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 \*Date of Approval by Graduate Council

\_\_\_\_\_  
 Reported by Graduate Council Chair

\_\_\_\_\_  
 \*Date of Approval by Health Care Colleges Council (HCCC)

\_\_\_\_\_  
 Reported by HCCC Chair

\_\_\_\_\_  
 \*Date of Approval by Senate Council

\_\_\_\_\_  
 Reported by Senate Council Office

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 \*Date of Approval by University Senate

\_\_\_\_\_  
 Reported by Senate Council Office

\*If applicable, as provided by the Rules of the University Senate

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 ACTION OTHER THAN APPROVAL

Rev 07/06



**Robert L. Houtz, Professor**  
*Chair, Department of Horticulture  
Plant Physiology/Biochemistry/  
Molecular Biology Program  
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March 15, 2010

Dr. Jeannine Blackwell, Dean  
Graduate School  
102 Gillis Building  
University of Kentucky  
Campus 0033

**FYI - This cover letter addresses a variety of changes, not just the MS Plant and Soil Sciences Change.**

Dear Dean Blackwell:

We would like to propose a new umbrella graduate degree program (Integrated Graduate Program in Plant and Soil Sciences, IPSS) which will provide an integrative and creative approach to graduate education in the plant and soil sciences. Graduate faculty in the departments of Forestry, Horticulture, and Plant and Soil Sciences support this proposal. The objectives of this proposal are to build strength in the currently existing graduate M.S. and PhD programs in Crop Science, Plant Physiology, Molecular Biology and Biochemistry, Horticulture, and Soil Science by combining these programs into an overall Integrated Graduate Program. The integrated program offers many advantages in student training, recruitment, program student numbers, and efficiency in administration. The program provides unique opportunities to cultivate and exploit the benefits that can be derived from an interdisciplinary approach to graduate education and research, and significantly contributes to the culture and development of graduate students as future scholars. There are two new courses associated with the IPSS program, IPS 610, and IPS 625.

The IPSS program would be a new graduate program with several options that stem from existing plant and soil science graduate programs, but also provides the opportunity for the creation of new graduate programs. The existing graduate programs in plant and soil science will continue to operate until existing students matriculate through those programs. We would anticipate a starting date for the IPSS graduate program in the fall of 2011.

A brief perusal of Plant and Soil Science graduate programs across the country shows that most are associated with Plant and Soil Science departments, but none are based on an interdisciplinary approach with separate departments like the IPSS program.

Please find attached as outlined below the documents necessary for consideration of the IPSS program.

- IPSS Proposal
- Request for new doctoral degree form
- Request for change in MS degree program
- Application for new courses: IPS610
- Application for new courses: IPS 625
- IPS 610 course description
- IPS 625 course description
- Sample syllabus IPS 610
- Sample syllabus IPS 625
- Sample distribution of courses in IPSS based on learning objectives
- Assessment Plan – Graduate Program in Integrated Plant and Soil Sciences

Sincerely,



Robert L. Houtz



Mark S. Coyne



David A. Van Sanford

xc: Dr. M. Scott Smith, Dean  
Dr. Nancy Cox, Associate Dean for Research  
Dr. Jimmy Henning, Associate Dean for Extension  
Dr. Larry Jones, Associate Dean for Academic Programs  
Dr. Larry Grabau, Assistant Dean for Academic Programs  
Dr. Todd Pfeiffer, Chair, department of Plant and Soil Sciences