September 22, 2010

MEMORANDUM

TO: Cheng-i Wei  
Dean, College of Agriculture and Natural Resources

FROM: Elizabeth Beise  
Associate Provost for Academic Planning and Programs

SUBJECT: Proposal to modify the curriculum of the PhD in Plant Sciences (PCC log no. 10004)

At its meeting on September 17, 2010, the Senate Committee on Programs, Curricula and Courses approved your proposal to modify the curriculum of the PhD in Plant Sciences. A copy of the approved proposal is attached.

The changes are effective Spring 2011. The College should ensure that the changes are fully described in the Graduate Catalog and in all relevant descriptive materials, and that all advisors are informed.

MDC/

Enclosure

cc: David Salness, Chair, Senate PCC Committee  
Sarah Bauder, Office of Student Financial Aid  
Reka Montfort, University Senate  
Erin Howard, Data Administration  
Donna Williams, Institutional Research & Planning  
Anne Turkos, Archives  
Linda Yokoi, Office of the Registrar  
Thomas Castonguay, Graduate School  
Leon Slaughter, College of Agriculture and Natural Resources  
William Kenworthy, Plant Sciences and Landscape Architecture
THE UNIVERSITY OF MARYLAND, COLLEGE PARK
PROGRAM/CURRICULUM/UNIT PROPOSAL

- Please email the rest of the proposal as an MSWord attachment to pcc-submissions@umd.edu.
- Please submit the signed form to the Office of the Associate Provost for Academic Planning and Programs, 1119 Main Administration Building, Campus.

College/School: Agriculture and Natural Resources
College/School Unit Code-First 8 digits: 01202500
Unit Codes can be found at: https://hypprod.umd.edu/Html_Reports/units.htm

Department/Program: Plant Science and Landscape Architecture/Plant Science Graduate Ph.D. Program (PLSC)
Department/Program Unit code-Last 7 digits: 1252701

Type of Action (choose one):

X Curriculum change (including informal specializations)  
0 New academic degree/award program
0 Renaming of program or formal Area of Concentration  
0 New Professional Studies award iteration
0 Addition/deletion of formal Area of Concentration  
0 New Minor
0 Suspend/delete program
0 Other

Italics indicate that the proposed program action must be presented to the full University Senate for consideration.

Summary of Proposed Action: The PLSC graduate program proposes a curriculum change to the Ph.D. program that will eliminate the current requirement for 2 credit hours of Graduate Seminar (PLSC 798) and instead require one semester (2 credit hours) of Research Methods (PLSC 608) and 2 semesters (offered as 1 credit per semester and repeatable for 2 credits) of PLSC 789 (Advances in Research). The change will enhance student understanding of research methods and presentation compared to the existing requirement.

APPROVAL SIGNATURES - Please print name, sign, and date. Use additional lines for multi-unit programs.

1. Department PCC Committee Chair: Dr. Joseph Sullivan  
   Signature:  
   Date: 4/21/10

2. Department Chair: Dr. William J. Kenworthy  
   Signature:  
   Date: 4/21/10

3. College/School PCC Chair  
   Signature: Scott Glenn  
   Date: 6/10/10

4. Dean  
   Signature:  
   Date: 6/10/10

5. Dean of the Graduate School (if required)  
   Signature:  
   Date: 7/21/10

6. Chair, Senate PCC  
   Signature: David J. Alness  
   Date: 9/17/10

7. University Senate Chair (if required)  
   Signature:  
   Date:

8. Vice President for Academic Affairs & Provost  
   Signature:  
   Date: 9/30/2010
**Current (old) Requirements:**

The Ph.D. degree in the Plant Science Graduate program in the Department of Plant Science and Landscape requires demonstration of a high level of competence in the discipline and the completion of original, advanced research which is presented in a departmental seminar and as a doctoral dissertation. At a minimum, the Ph.D. student is required to complete course work equivalent to what is normally expected of a M.S. student plus 12 credits of dissertation research (PLSC 899). Students are also required to complete 2 semesters (1 credit per semester) of PLSC 798 (Graduate Seminar). In addition, students are required to have a second semester of a graduate level biochemistry or statistics course. The group of formal courses selected should form a logical and coherent program that will provide the student with sufficient depth in the area of specialization to be fully competent to carry out the dissertation research planned and to work successfully as a professional.

**Proposed (new) Requirements:**

The proposed new requirements would eliminate the 2 semesters (1 credit per semester) of PLSC 798 (Graduate Seminar) and replace it with a requirement for 2 semester hours of PLSC 608 (Research Methods) and 2 semester hours of PLSC 789 (Advances in Research). All other requirements would remain the same.

**Rationale for Change:**

Based on feedback from past and current students in the program, as well as faculty input, the program believes that the current seminar requirement (PLSC 798) does not adequately meet the objective of preparing students to formulate, develop, prepare and present a coherent and well organized research plan or proposal to the level that the program aspires. PLSC 608 (Research Methods) will be directed and developing and enhancing student’s ability to define a research problem, develop a research plan, prepare a research proposal and present a research proposal to peers. The course will also cover topics related to responsible conduct in research. PLSC 789 (Advances in Research) will prepare students to critically evaluate published research and present critical reviews of published research using a “journal club” format. Together these curriculum changes will enhance the program’s ability to prepare students for academic, research, industrial or government careers.

**Sample Program:**

Because of the wide-range of research areas in the PLSC graduate program, specific course requirements are kept at minimum allowing students, in consultation with their advisor, to develop a plan of study tailored to their specific research and professional goals. A sample program is listed in the following table:

<table>
<thead>
<tr>
<th>Courses</th>
<th>“Old” requirement</th>
<th>“New” Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 798</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>PLSC 608</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>PLSC 789</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>PLSC 899 (research)</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Electives¹</td>
<td>varies</td>
<td>varies</td>
</tr>
<tr>
<td>Total (minimum)</td>
<td>varies</td>
<td>varies</td>
</tr>
</tbody>
</table>

¹If students have not completed an M.S. electives must include course work required for M.S. degree. In addition, course-work must include one additional graduate level course in biochemistry of statistics.
Handling of Existing Students:

Students already enrolled in the PLSC M.S program will be allowed to continue their degree objective with the requirement for 2 semesters of PLSC 798. For those students that have yet to complete PLSC 798 they will be given the option to continue under the “old” requirements or select the “new” requirement. The PLSC graduate coordinator will contact each PLSC graduate student and obtain in writing which option the student will include in his or her program of study.