Proposal to the Senate Educational Policy Committee

PROPOSAL TITLE: Correction of the Program of Study listing for the PhD program in Chemistry

SPONSOR: Wilfred A. van der Donk, Professor of Chemistry, 244 5360, vddonk@illinois.edu, Director of Graduate Studies

COLLEGE CONTACT: Karen Carney, Associate Dean, LAS, kmcarney@illinois.edu

BRIEF DESCRIPTION: In June 2014, the Graduate College contacted the department regarding a proposed change in wording of a joint degree program on the Graduate College Program of Study website for chemistry. When the Director of Graduate Studies (Wilfred van der Donk), the Department Head (Gregory Girolami), and the Associate Head (Scott Silverman) looked at the proposed change (which we approved), we realized that several of the descriptions of the chemistry graduate program on the POS were either ambiguous or not in line with our actual program. We provide here our requested changes in the POS for chemistry and the justification for the changes.

The ambiguous wording on the current Program of Study page for chemistry (https://nextcourses.illinois.edu/graduate/graduate-majors/chemistry/#doctoratestext) states:

500-level courses in the major area of interest 10-16
Courses in allied areas or fields 4-12

What is unclear from the way it is listed is that the minimum number of total required hours of course work to earn a PhD in chemistry is 20 plus one hour of a seminar course. The current listing could be interpreted as 14 hours being sufficient (10 + 4) and does not specifically mention the requirement of a seminar course. The POS does have a footnote stating:

For additional details and requirements refer to the department's Graduate Programs and the Graduate College Handbook.

Indeed this links to our department web page and our Graduate Manual that does correctly list these requirements, but it would be better if the description on the POS would also be in line and unambiguous. Below we list our suggested revised entry that would eliminate this ambiguity.

Document updated October 2013
The second issue involves the restriction to 500-level courses. When the university introduced the 500 level for graduate courses in the mid 2000s, it appears that the description in our Program of Study was simply changed from 400-level courses to 500-level courses. However, the department and departments in allied fields offer several 400 level courses that can be taken by both graduate and undergraduate students. Since the introduction of the 500 level courses, we have allowed our graduate students to take 400 level courses provided they were approved by the department.

To remove both the ambiguity and to reflect the actual requirements of the department better (as listed in our Graduate Manual), we request the Program of Study entry to read:

500-level or 400-level courses in chemistry or allied fields 20 (max 8 at 400-level)
Seminar course (CHEM5X5) 1

This simple change would bring the Program of Study listing in line with the actual departmental requirements and would eliminate the current ambiguity.

We would then also like to change the accompanying text on the POS as follows (changes in red):

Doctoral programs are offered in a wide range of specialties, including the traditional areas of analytical, inorganic, organic, and physical chemistry as well as materials chemistry and chemical biology. The formal course requirements involve 12 or more hours of 500-level courses, plus 8 or fewer hours of 400-level courses, for a total of 20 hours in chemistry and allied relevant fields. Besides completing formal coursework, students will present a literature seminar, have a formal review of progress following the completion of coursework, pass an oral preliminary examination on research preparation, present and defend an original research proposal not related to their thesis research, and submit a thesis on original research, which is defended at a final oral examination.

JUSTIFICATION: The current description of the course requirement for a PhD in chemistry is confusing and incorrect. With the proposed changes the POS on the website would be more clear and correctly reflect the long-standing requirements (which have not changed in over 15 years).

BUDGETARY AND STAFF IMPLICATIONS:

1) Resources
   a. How does the unit intend to financially support this proposal?
      No resources are required
   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?
      Not applicable
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 external resources required

d. Please provide a letter of acknowledgment from the college that outlines the financial arrangements for the proposed program.
No external resources required

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
No changes required on faculty resources.

   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 acknowledgment from units impacted should be included.)*
No specific impact on course enrollment in 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 on the University Library

   d. Please address the impact on technology and space (e.g. computer use, laboratory use, equipment, etc.)
No impact on technology and space

For new degree programs only:

3) Briefly describe how this program will support the University’s mission, focus, and/or current priorities. Include specific objectives and measurable outcomes that demonstrate the program’s consistency with and centrality to that mission.

4) Please provide an analysis of the market demand for this degree program. What market indicators are driving this proposal? What type of employment outlook should these graduates expect? What resources will be provided to assist students with job placement?

5) If this is a proposed graduate program, please discuss the programs intended use of waivers. If the program is dependent on waivers, how will the unit compensate for lost tuition revenue?

**DESIRED EFFECTIVE DATE:** Fall 2015

**STATEMENT FOR PROGRAMS OF STUDY CATALOG:**
Doctor of Philosophy in Chemistry

Doctoral programs are offered in a wide range of specialties, including the traditional areas of analytical, inorganic, organic, and physical chemistry as well as materials chemistry and chemical biology. The formal course requirements involve 12 or more hours of 500-level courses, plus 8 or fewer hours of 400-level courses, for a total of 20 hours in chemistry and allied relevant fields. Besides completing formal coursework, students will present a literature seminar, have a formal review of progress following the completion of coursework, pass an oral preliminary examination on research preparation, present and defend an original research proposal not related to their thesis research and submit a thesis on original research, which is defended at a final oral examination.

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

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 or 500 level courses in Chemistry or allied fields</td>
<td>20 (max 8 at 400 level)</td>
</tr>
<tr>
<td>Seminar (CHEM5X5)</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 599 Thesis Research (0 min applied toward degree)</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours</td>
<td>64</td>
</tr>
</tbody>
</table>

Other Requirements

- Other requirements may overlap
- Teaching experience: 1 year
- Qualifying Exam Required: No
- Preliminary Exam Required: Yes
- Original Research Proposal: 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 Graduate Programs and the Graduate College Handbook.

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

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<td>CHEM 599 Thesis Research (0 min applied toward degree)</td>
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</tr>
<tr>
<td>Total Hours</td>
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</tr>
</tbody>
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Other Requirements

- Other requirements may overlap
- Teaching experience: 1 year
- Qualifying Exam Required: No
- Preliminary Exam Required: Yes
Original Research Proposal: 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 Graduate Programs and the Graduate College Handbook.

## Appendix A:
(Proposed Curriculum Revisions)

### Entering with a MS or MA degree:

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<thead>
<tr>
<th>Current Requirements:</th>
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<th>Revised Requirements:</th>
<th>Revised Hours</th>
</tr>
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<td>CHEM 599</td>
<td>0 min</td>
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### Entering with a BS/BA degree:

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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:

Karen [Signature]  1-27-15
Unit Representative: Date:

[Signature]  1-27-15
College Representative: Date:

[Signature]  3/6/15
Graduate College Representative: Date:

Council on Teacher Education Representative: Date:
March 18, 2015

Gay Miller, Chair
Senate Committee on Educational Policy
Office of the Senate
228 English Building, MC-461

Dear Professor Miller:

Enclosed is a copy of a proposal from the College of Liberal Arts and Sciences to correct wording in the Academic Catalog listing for the PhD in Chemistry.

Sincerely,

Kathryn A. Martensen
Assistant Provost

Enclosures

c:  J. Hart
    A. McKinney
    W. Wimmer
    K. Carney
    W. van der Donk
    A. Edwards
March 16, 2015

Kathy Martensen
Office of the Provost
207 Swanlund MC-304

Dear Kathy,

Enclosed please find the proposal for correction of the Program of Study listing for the PhD Program in Chemistry. The Graduate College Executive Committee has approved this proposal.

The proposal was first received at the Graduate College on January 30, 2015. The need for the proposal was identified because Course Leaf implementation revealed differences between the program of study on file, and the one published and executed on the department's website. The proposal was reviewed by the Program Subcommittee on February 24, 2015. As an outcome of that meeting, minor revision to some of the wording was requested. The proposal was approved to move forward to the Executive Committee pending the wording changes being made. The revised proposal was received on March 2, 2015 and it was forwarded to the Executive Committee. The Executive Committee unanimously approved it at their March 10, 2015 meeting. I send the proposal to you now for further review.

Sincerely,

John C. Hart
Associate Dean
Graduate College

c: K. Carney
A. McKinney
W. van der Donk
Senate Educational Policy Committee
Proposal Check Sheet

PROPOSAL TITLE (Same as on proposal): Correction of the Program of Study listing for the PhD program in Chemistry

PROPOSAL TYPE (select all that apply below):

A. □ Proposal for a NEW or REVISED degree program. Please consult the Programs of Study Catalog for official titles of existing degree programs.
   1. Degree program level:
      □ Graduate □ Professional □ Undergraduate

2. □ Proposal for a new degree (e.g. B.S., M.A. or Ph.D.):
   Degree name, "e.g., Bachelor of Arts or Master of Science": _____

3. □ Proposal for a new or revised major, concentration, or minor:
   □ New or □ Revised Major in (name of existing or proposed major): _____
   □ New or □ Revised Concentration in (name of existing or proposed concentration): _____
   □ New or □ Revised Minor in (name of existing or proposed minor): _____

4. □ Proposal to rename an existing major, concentration, or minor:
   □ Major □ Concentration □ Minor
   Current name: _____
   Proposed new name: _____

5. □ Proposal to terminate an existing degree, major, concentration, or minor:
   □ Degree □ Major □ Concentration □ Minor
   Name of existing degree, major, or concentration: _____

6. □ Proposal involving a multi-institutional degree:
   □ New □ Revision □ Termination
   Name of existing Illinois (UIUC) degree: _____
Name of non-Illinois partnering institution: ____

Location of non-Illinois partnering institution:

☐ State of Illinois    ☐ US State: ____    ☐ Foreign country: ____

B. ☐ Proposal to create a new academic unit (college, school, department, program or other academic unit):

Name of proposed new unit: ____

C. ☐ Proposal to rename an existing academic unit (college, school, department, or other academic unit):

Current name of unit: ____

Proposed new name of unit: ____

D. ☐ Proposal to reorganize existing units (colleges, schools, departments, or program):

1. ☐ Proposal to change the status of an existing and approved unit (e.g. change from a program to department)

   Name of current unit including status: ____

2. ☐ Proposal to transfer an existing unit:

   Current unit’s name and home: ____

   Proposed new home for the unit: ____

3. ☐ Proposal to merge two or more existing units (e.g., merge department A with department B):

   Name and college of unit one to be merged: ____

   Name and college of unit two to be merged: ____

   Proposed name and college of new (merged) unit: ____

4. ☐ Proposal to terminate an existing unit:

   Current unit’s name and status: ____

E. ☒ Other educational policy proposals (e.g., academic calendar, grading policies, etc.)

   Nature of the proposal: Clarify ambiguous wording in the Program of Study listing for the Chemistry PhD program

Revised 10/2012