Proposal to the Senate Educational Policy Committee

PROPOSAL TITLE: Revision of the BSLAS:Chemistry; BS:Chemistry; BS: Chemistry: Environmental Chemistry Concentration

SPONSOR: Professor Alexander Scheelne, Department of Chemistry, 333-2999; scheelin@illinois.edu

COLLEGE CONTACT: Associate Dean Ann Mester, College of Liberal Arts and Sciences, 333-1350, mester@illinois.edu

BRIEF DESCRIPTION: Due to the creation of four individual study research courses in the Department of Chemistry the following curricular items will need to be revised:

BSLAS: Chemistry: departmental distinction and limiting the number of hours that can count toward the major;

BS:Chemistry: departmental distinction and the technical elective option;

BS: Chemistry: Environmental Chemistry Concentration: Advanced Course options.

JUSTIFICATION: With only Chemistry 499 Senior Thesis as a research course number, students could only get upper level research credit if they completed a thesis. By adding non-thesis research courses, we improve flexibility and broaden access to research experience. However, we still believe that graduation with distinction requires a bachelor's thesis. New courses (CHEM 197, 297, 397 and 497) and the revised requirements allow a combination of flexibility while maintaining standards otherwise unattainable.

BUDGETARY AND STAFF IMPLICATIONS:

a. Additional staff and dollars needed. None
b. Internal reallocations (e.g., change in class size, teaching loads, student-faculty ratio, etc.) While we hope additional students will carry out research, no change in resource allocation is envisioned. Research support is primarily external and will remain so.

c. Effect on course enrollment in other units and explanations of discussions with representatives of those departments. Some changes in the electives students choose will inevitably occur. However, since the total number of technical elective hours is unchanged, the overall effect on other units will, on average, be nil.

d. Impact on the University Library Additional use of library journals is expected, but current licensing does not incur additional costs per use.

e. Impact on computer use, laboratory use, equipment, etc. Any additional wear and tear on equipment will require additional external resources to replace. The additional productivity of more students in labs should compensate for added use and increase grant support in proportion to cost.

**DESIRED EFFECTIVE DATE:** Fall 2009
CLEARANCES:

Signatures:

Chemistry  
Signature:  
Date: 2-23-09

SQCS  
Signature:  
Date: 3/24/09

LAS  
Signature:  
Date: 3/20/09

Provost Representative:

Date:

Educational Policy Committee Representative:

Date:
STATEMENT FOR PROGRAMS OF STUDY CATALOG:

Chemistry

Chemistry
Head of Department: Steven Zimmerman
Department Office: 107 Noyes Laboratory, 505 South Mathews, Urbana, (217) 333-0711

Chemistry

www.chemistry.uiuc.edu/chem

The Department of Chemistry offers two undergraduate degrees. Specialized Curriculum in Chemistry (leading to the Bachelor of Science in Chemistry) which also offers an Environmental Chemistry Concentration, or one of two concentrations (Chemistry Concentration or Chemistry Teaching Concentration) in the Sciences and Letters Curriculum (leading to the Bachelor of Science in Liberal Arts and Sciences). The department also sponsors a minor in chemistry. These programs of study are administered by the Department of Chemistry.

The specialized curriculum in chemistry is a rigorous, specialized program suitable for those planning careers in chemistry. It meets standards prescribed by the American Chemical Society. The chemistry concentration in the Sciences and Letters Curriculum is used by some students planning chemistry careers, but it is more often chosen by students wishing to obtain chemistry backgrounds for use in related fields.

Cooperative Education Program: Students accepted into the School of Chemical Sciences Cooperative Education Program spend alternate periods of attendance at the University with periods of employment in industry or government. Transcript recognition is given as well as a certificate of participation at graduation. Additional information and applications are available in the School of Chemical Sciences Placement and Student Services office.

Major in Sciences and Letters Curriculum

Students must select one concentration.

Chemistry Concentration

E-mail: debe@illinois.edu

Degree title: Bachelor of Science in Liberal Arts and Sciences
PROPOSAL TO THE SENATE COMMITTEE ON EDUCATIONAL POLICY TO ESTABLISH OR MODIFY AN UNDERGRADUATE MINOR

Title of the proposed minor: Revision to the Chemistry Minor

Sponsoring unit(s): Professor Alexander Scheeline, Department of Chemistry, 333-2999; scheelin@illinois.edu

COLLEGE CONTACT: Associate Dean Ann Mester, College of Liberal Arts and Sciences, 333-1350, mester@illinois.edu

Brief description of the program of study:

Due to the creation of four individual study research courses in the Department of Chemistry the Chemistry Minor must be revised to restrict the total hours of research courses that can count toward the minor.

Justification: With only Chemistry 499 Senior Thesis as a research course number, students could only get upper level research credit if they completed a thesis. By adding non-thesis research courses, we improve flexibility and broaden access to research experience. New courses (CHEM 197, 297, 397 and 497) and the revised requirements allow a combination of flexibility while maintaining standards otherwise unattainable.

Budgetary and Staff Implications:

a. Additional staff and dollars needed: none

b. Internal reallocations (e.g. change in class size, teaching loads, student-faculty ratio, etc.): none

c. Effect on course enrollment in other departments and explanations of discussions with representatives of those departments: none

d. Impact on library, computer use, laboratory use, equipment, etc. As students receiving chemistry minors rarely if ever do research in chemistry, we expect no impact.

Requirements: The requirements of the Chemistry Minor remained unchanged:

1. Maximum of 10 hours of Chemistry courses numbered 205 or lower.\(^1\)

2. Minimum of 6 hours of 300- or 400-level Chemistry and/or Biochemistry courses

4. Chemistry courses selected in consultation with adviser

20 Total

Chem minor revision
Prerequisites for the minor: No prerequisites.

Expected enrollment in the minor: provide an estimate of the total number of students expected in the minor once it achieves its full enrollment.

Admission to the minor: describe how the department will monitor the admission process for the minor. If the department intends to limit enrollment in the minor, tell how this will be done.

Minor advisor: describe how students enrolled in the minor will be advised.

Certification of successful completion: The college of the student will confirm whether the minor has been completed, based on the course work designated by LAS and the Chemistry Department. If a Minor Modification Form is needed, LAS will review the course substitutions, in consultation with the Chemistry Department if needed, and approve completion of the minor with the college of the student.

Proposed Effective Date: Fall 2009
CLEARANCES:

Department of Chemistry

School of Chemical Sciences

College of Liberal Arts and Sciences

Chair, Senate Educational Policy Committee:
Statement for the Programs of Study Catalog: provide a brief description of the minor that includes a list of the specific courses and hours required.

**Minor in Chemistry**

E-mail: debe@illinois.edu

Web address for department: [www.scs.uiuc.edu/chem](http://www.scs.uiuc.edu/chem)

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<thead>
<tr>
<th>Hours</th>
<th>Requirements</th>
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<tbody>
<tr>
<td>10</td>
<td>Maximum of 10 hours of Chemistry courses numbered 205 or lower. ¹</td>
</tr>
<tr>
<td>6</td>
<td>Minimum of 6 hours of 300- or 400-level Chemistry and/or Biochemistry courses</td>
</tr>
<tr>
<td>4</td>
<td>Chemistry courses selected in consultation with adviser</td>
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<tr>
<td>20</td>
<td>Total ²</td>
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1. CHEM 101 may not count in the 20 hours.

2. No more than 10 hours of the following courses may count toward the 20 hours required for the Chemistry Minor: CHEM 197, 199, 297, 397, 497, and 499.