Resolution # 42 2010-2011
College Senate

Supersedes Res #: __________

TO: Dr. John R. Halstead, College President

FROM: The College Senate: May 2, 2011

RE: I. Formal Resolution (Act of Determination)

II. Recommendation (Urging the Fitness of)

III. Other, For Your Information (Notice, Request, Report, etc.)

SUBJ: Honors Program in Chemistry (Proposal #60-10-11 UC)

Signed: [Signature]

Date: 5/11/11

(Jose R. Torre, 2010-11, College Senate President)

Please fill out the bottom portion and follow the distribution instructions at the end of this page.

TO: Jose R. Torre, College Senate President

FROM: John R. Halstead, College President

RE: I. Decision and Action Taken on Formal Resolution (circle choice)

a. Accepted - Implementation Effective Date: Immediately
b. Deferred for discussion with the Faculty Senate on __/__/___
c. Unacceptable for the reasons contained in the attached explanation

II, III. Response to Recommendation or Other/FYI

a. Received and acknowledged __/__/___

b. Comment:

Signed: [Signature]

Date: 5/18/11

(Dr. John R. Halstead, President, The College at Brockport)

DISTRIBUTION
COLLEGE SENATE OFFICE
RESOLUTION PROPOSAL COVER PAGE
DEADLINE FOR SUBMISSIONS: FEBRUARY 28
Incomplete proposals may be returned and proposals received after the deadline may not be reviewed until next semester.

Routing Number #60_2010-2011UC
Routing # assigned by Senate Office
Use routing number and title in all reference to this proposal.

This Proposal Replaces Resolution

INSTRUCTIONS – please, no multiple attachments – submit each proposal electronically as one Word document.
- Submit only complete proposals with this cover page, attachments and support letters from your department chair and dean merged into one Word document.
- Signed documents may be submitted as hard copies.
- Use committee guidelines available at brockport.edu/collegesenate/proposal.html.
- Locate the Resolution # and date this proposal will replace at our “Approved Resolutions” page on our Web site.
- Do not send your proposal as a .pdf file.
- Email your proposal as one attachment to senate@brockport.edu. Signed pages can be sent/faxed as hard copies.
- All revisions must be resubmitted to senate@brockport.edu with the original cover page including routing number.
- Questions? Call the Senate office at 395-2586 or the appropriate committee chairperson.

1. PROPOSAL TITLE: Please be somewhat descriptive, ie. Graduate Probation/Dismissal Proposal rather than Graduate Proposal.

Approval of Honors Thesis in Chemistry

2. BRIEF DESCRIPTION OF PROPOSAL:
The Chemistry Department has offered an honors degree to their majors since 1996 but approval never formally went through Senate.

3. WILL ADDITIONAL RESOURCES AFFECTING BUDGET BE NEEDED? _x_ NO ___ YES EXPLAIN YES

4. DESCRIBE ANY DATA RELATED TO STUDENT LEARNING OUTCOMES ASSESSMENT USED AS PART OF THE RATIONALE FOR THE REQUESTED SENATE ACTION.

N/A

5. HOW WILL THIS EFFECT TRANSFER STUDENTS: No effect

6. ANTICIPATED EFFECTIVE DATE: immediately

7. SUBMISSION & REVISION DATES: PLEASE DATE ALL REVISED DOCUMENTS TO AVOID CONFUSION.

<table>
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8. SUBMITTED BY: (contact person)

<table>
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<tr>
<th>Name</th>
<th>Department</th>
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<tbody>
<tr>
<td>Markus M. Hoffmann</td>
<td>Chemistry</td>
<td>-5587</td>
<td><a href="mailto:mhoffman@brockport.edu">mhoffman@brockport.edu</a></td>
</tr>
</tbody>
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9. COMMITTEES TO COPY: (Senate office use only)

<table>
<thead>
<tr>
<th>Standing Committee</th>
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<td>Standing Committee</td>
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<td>Enrollment Planning &amp; Policies</td>
<td>Executive Committee</td>
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<td>Passed GED's to Vice Provost</td>
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<td>Senate</td>
<td>4/18/11, 5/2/11 vote</td>
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NOTES: See response to concerns on page 2. Updates made prior to vote.

Addressing of Concerns Raised to the Proposal
This program has been in place since 1996, but was never given Senate approval.

There is a concern regarding Point #3 that while entrance into the Honors program can use “non-Brockport” credit criteria, Delivery of the Honors degree by Brockport must depend upon coursework done at Brockport. In essence, we cannot give Honors for work done elsewhere.

We changed point 3 and inserted point #4 to clarify:

3. The student must achieve a cumulative GPA of at least 3.25 in CHM205 and all courses taken in chemistry that have CHM205 as a direct or indirect prerequisite.

4. As entrance requirement for transfer students a cumulative GPA of at least 3.25 is required for all courses that transferred as CHM 205 and chemistry courses that have CHM205 as a direct or indirect prerequisite. While at Brockport, the transfer student must achieve a cumulative GPA of at least 3.25 in all courses taken in chemistry that have CHM205 as a direct or indirect prerequisite.

For point #5, the department needs to specify the number of credit hours of research (200 hours is approximately 5 cr).

There was concern for how honors credit would be given to students. The committee suggests a revision to the second part of #5 to exclude paid opportunities as counting towards the academic requirement for the honors program.

In addressing both of these two concerns we first need to comment that thus far every single honors thesis written by chemistry students resulted from research conducted as a summer research fellow with a stipend. Summer research experience is of extreme value to our chemistry majors and we therefore constantly encourage our majors to seek summer research experiences. We are also continuously seeking external support and are raising funds for undergraduate summer research stipends in chemistry. It would be counterproductive if research by students who received summer research stipends would not be eligible for an honors thesis.

To address concerns of keeping track of credits in registration and records, we made changes to the text to simply use the requirement of 200 hours (or as equivalent 5 credits of independent study) as acceptance criterion to receive departmental approval for the registration for the required course CHM490: Honors Thesis in Chemistry.

Former point # 5 (now point #6) now reads : The student must complete a thesis project consisting of a minimum of 200 hours of research under the direction of a faculty sponsor, excluding the time spent preparing and presenting the final thesis. The research is typically performed as a summer research fellow between the Junior and Senior year. Research performed at external institutions is acceptable as long as the external research mentor agrees in writing to serve as the faculty sponsor. Thesis projects for academic credit as independent study with a faculty sponsor (CHM399/499) is acceptable for a minimum of at least 5 credits, which would be about equal to 200 hours. In any event, departmental approval is required for students to register for CHM490 “Chemistry Honors Thesis” and is only granted after the faculty sponsor confirms that the student has completed 200 hours of research. Original laboratory notebooks maintained during the course of the project will be retained with the faculty sponsor.

CHM 490, Honors thesis, should be 1 credit so that it is consistent with the College Honors Thesis course.

We understood HON 490 to be 3 credits. Now we are corrected that credits can vary between 1-3. We still prefer 3 credits to clearly indicate to our majors who wish to pursue an honors degree that the thesis writing is a substantial time commitment. We also note that we require students to take CHM 490 in the fall of their senior year. If a student underestimates the time commitment and falls short of completing the thesis an incomplete can be assigned as a grade, and the student can still complete the thesis writing during the remainder of the academic year before graduating and leaving Brockport.

For clarification, the department should submit a side-by-side chart of typical student progression through the major and with a student who seeks an honors concentration – including a credit comparison. Please signify any double-dipping of honors course credits with the chemistry major.

A comparison is now included.

Addition of Chemistry Honors Degree Program
Rationale for the new option

In actuality, the Department of Chemistry has offered Departmental Honors in Chemistry since 1996. However, approval at the time was provided by Michael Fox and did actually never go through senate. It is not known at this point if Senate approval was not required for Departmental Honors at that time in 1996 and it does now, or if this was an oversight that did not get discovered until February of 2011. In any event, the Department of Chemistry is now seeking formal approval by the Senate to offer Departmental Honors in Chemistry.

Entrance and Program requirements:

In accordance with Faculty Senate Resolution #17 (1995-96) approved by President John E. Van de Wetering on April 8, 1996, the members of the Faculty of Chemistry have established the following criteria for earning Departmental Honors in Chemistry. It is intended that the award of Departmental Honors in Chemistry recognize both academic excellence and scholarly achievement at the undergraduate level in chemistry.

1. The student must complete the requirements for a major in Chemistry in force at the date of his/her matriculation at the College at Brockport.

2. The student must achieve a cumulative GPA of at least 3.25 for all courses taken at the College at Brockport.

3. The student must achieve a cumulative GPA of at least 3.25 in CHM205 and all courses taken in chemistry that have CHM205 as a direct or indirect prerequisite.

4. As entrance requirement for transfer students a cumulative GPA of at least 3.25 is required for all courses that transferred as CHM 205 and chemistry courses that have CHM205 as a direct or indirect prerequisite. While at Brockport, the transfer student must achieve a cumulative GPA of at least 3.25 in all courses taken in chemistry that have CHM205 as a direct or indirect prerequisite.

5. The student must complete at the College at Brockport a minimum of 17 credits of chemistry coursework in courses that have CHM205 as a prerequisite.

6. The student must complete a thesis project consisting of a minimum of 200 hours of research under the direction of a faculty sponsor, excluding the time spent preparing and presenting the final thesis. The research is typically performed as a summer research fellow between the Junior and Senior year. Research performed at external institutions is acceptable as long as the external research mentor agrees in writing to serve as the faculty sponsor. Thesis projects for academic credit as independent study with a faculty sponsor (CHM399/499) is acceptable for a minimum of at least 5 credits, which would be about equal to 200 hours. In any event, departmental approval is required for students to register for CHM490 “Chemistry Honors Thesis” and is only granted after the faculty sponsor confirms that the student has completed...
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7. The student must prepare a written Senior Thesis and for this purpose register for three credits of CHM490 “Chemistry Honors Thesis” in the fall semester of the student’s senior year. The Senior Thesis must be approved by the student's Thesis Committee and by the Faculty of Chemistry. This thesis may be used to meet the thesis requirements of both the Departmental Honors Program and the College Honors Program.

8. The student must present his/her thesis at Scholars' Day or at an appropriate, alternate, public forum. This presentation will be evaluated by the student's Thesis Committee as part of the review process leading to the award of Departmental Honors in Chemistry.

**Procedures for Awarding Departmental Honors in Chemistry**

At the request of the student's faculty sponsor, the Department Chairperson shall appoint a Thesis Committee consisting of three faculty members, including the student's faculty sponsor. The committee shall verify GPA requirements, review the student's written thesis, evaluate the external presentation based on the thesis, and make a recommendation to the Faculty of Chemistry regarding the award of Departmental Honors to the student.

At the request of the student's Thesis Committee, the Department Chairperson shall include on the agenda of a meeting of the Faculty of Chemistry consideration of the student's Senior Thesis, consideration of the recommendation of the Thesis Committee, and a vote regarding the award of Departmental Honors. The Thesis Committee shall make the student's thesis and its recommendation available for review by members of the Faculty of Chemistry for at least one week prior to the this faculty meeting.

The student's Thesis Committee shall conduct the meeting of the Faculty of Chemistry during its consideration of the question of awarding Departmental Honors. At the conclusion of this consideration, a vote shall be taken by secret ballot on the question, "shall Departmental Honors in Chemistry be awarded to (student's name)?" A simple majority vote in the affirmative shall be sufficient for departmental approval.

The Department Chairperson shall report the recommendation of the student's Thesis Committee and the vote of the Faculty of Chemistry to the Director of the Honors Program. The original manuscript shall be retained in the Chemistry Department.

Description of new courses and a side-by-side comparison of the old and new program Credit hours must be included and totaled in clear tabular form

The thesis is based on research only and not on course work other than optional independent study in chemistry CHM399/499. However, we seek to require the new course CHM490 “Chemistry Honors Thesis” in addition to CHM399/499 to offer a course in similarity to HON490 “Honors Thesis Project” as a three credit course for students dedicated to completing the honors thesis in chemistry during their senior fall semester. A side-by-side comparison of the progression through the chemistry majors without and with honors is provided on next page.
Just as much as transfer students are currently able to complete a chemistry degree in four years they can opt to seek an honors degree in chemistry; there is no difference between transfer and non-transfer students. For both, transfer and non-transfer students, the main commitments are to engage in summer research, which is anyway typically between their junior and senior year, and write an honors thesis about their research findings during the subsequent fall semester.
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**Total for the Chemistry Major**: 54

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**Total for the Chemistry Honors Program**: 57
Sequence in which the courses would be offered to guarantee timely completion of the program

CHM399/499 are currently and have been offered to all majors wishing to do independent study/research with a faculty member in Chemistry. CHM490 “Chemistry Honors Thesis” is sought as a new course in addition to CHM399/499 to offer a course in similarity to HON490 “Honors Thesis Project” as a three credit course for students dedicated to completing the honors thesis in chemistry during their senior fall semester.

Staffing issues

No staffing issues. We have had students write an honors thesis under a chemistry mentor, on average about one student per year.

Resources, facilities that may be needed to implement the program

No new resources, facilities are needed.

Academic administration commentary

Letter of recommendation from chair
Letter of recommendation from Dean of School
If appropriate, letters of support from cooperating departments, agencies, and etc.