

Simon Fraser University

Office of the Vice-President, Academic

Memorandum

TO: Senate

FROM: J.M. Munro, Chair
Senate Committee on
Academic Planning

SUBJECT: Graduate Curriculum
Revisions - Department
of Chemistry
SCAP Reference: SCAP 95-39

DATE: August 10, 1995

Action undertaken by the Senate Graduate Studies Committee and the Senate Committee on Academic Planning gives rise to the following motion:

MOTION: "that Senate approve and recommend approval to the Board of Governors, as set forth in S.95-49 the proposed curriculum revisions including

- i) Change in credit hours from 4 to 3 for CHEM 805 and 806
- ii) CHEM 806 be graded satisfactory/unsatisfactory
- iii) Deletion of CHEM 802-3
- iv) Changes to the Degree Requirements for the Masters, Ph.D. and transfer from the M.Sc. to the Ph.D."



For Information:

Acting under delegated authority of Senate, the Senate Graduate Studies Committee has approved change of title and description for the following courses: CHEM 801-3, 805-3, 806-3.

CHANGES to CHEM 805/806 and CHEM 801

To facilitate earlier transfer from M.Sc. to Ph.D. and earlier completion of M.Sc. and Ph.D. degrees, it is proposed that:

1. Chem 805 be changed to a thesis research proposal seminar. Chem 805 will be mandatory for M.Sc. and Ph.D. students.
2. Chem 805 & 806 be reclassified as 3 credit hours.
3. Chem 806 be evaluated as Satisfactory/Unsatisfactory and be counted towards the student's minimum course requirement.
4. Chem 806 be evaluated as Satisfactory or Unsatisfactory jointly by the course instructors and the student's supervisory committee. In the event of an Unsatisfactory grade, the Department will adopt regulation 1.8.2 and follow the procedure for review of unsatisfactory progress (regulation 1.8.2 attached).
5. Chem 802 (Student Seminar II) be no longer offered.

CALENDAR INFORMATION:Department: ChemistryCourse Number: 805Title: M.Sc. & Ph.D. Research Thesis ProposalDescription: Critical Evaluation of Written and Oral Thesis Research Proposals.Credit Hours: 3 Vector: _____ Prerequisite(s) if any: -ENROLLMENT AND SCHEDULING:Estimated Enrollment: 12 When will the course first be offered: 96-1How often will the course be offered: Annually, in the Spring Semester.JUSTIFICATION:

1. Recommended by external review committee of 1994.
2. This replaces the existing CHEM 805 which is an evaluation of research proposals.
3. Credit hours have been reduced from 4 to 3 to reflect the preparation for this course.
4. Would be offered at the same time as CHEM 806.

RESOURCES:Which Faculty member will normally teach the course: A team of 3, drawn from the Department.What are the budgetary implications of mounting the course: No new faculty or resources are required. Existing CHEM 805 to be dropped.Are there sufficient Library resources (append details): Yes.

- Appended: a) Outline of the Course
 b) An indication of the competence of the Faculty member to give the course.
 c) Library resources

Approved: Departmental Graduate Studies Committee: S. Holdcraft Date: 6/4/95
 Faculty Graduate Studies Committee: N/A Date: 9/5/04/21
 Faculty: Chen, Jones Date: 24 April 95
 Senate Graduate Studies Committee: John H. Wu Date: 20 Jan 95
 Senate: ? Date: _____

CALENDAR INFORMATION:Department: Chemistry Course Number: 805Title: M.Sc. Research SeminarDescription: Critical Evaluation of Written and Oral Research Reports.Credit Hours: 4 Vector: _____ Prerequisite(s) if any: -ENROLLMENT AND SCHEDULING:Estimated Enrollment: 12 (+8 in CHEM 806) When will the course first be offered: 90-3How often will the course be offered: Annually, in the Fall Semester.JUSTIFICATION:

This course (and/or the equivalent CHEM 806) would be required by all graduate students in Chemistry, as proposed by the new departmental requirements for graduate degrees.

Its inception was recommended by the External Review of Chemistry, held in Spring 1988.

RESOURCES:

Which Faculty member will normally teach the course: A team of 4, normally drawn from the Departmental Graduate Studies Committee.

What are the budgetary implications of mounting the course: No new faculty or resources are required. The present cumulative examination system will be dropped.

Are there sufficient Library resources (append details): Yes.

Appended: a) Outline of the Course
 b) An indication of the competence of the Faculty member to give the course.
 c) Library resources

Approved: Departmental Graduate Studies Committee: P.W. Perline Date: 16 Feb 89

Faculty Graduate Studies Committee: P.W. Perline Date: 7 March 89

Faculty: _____ Date: _____

Senate Graduate Studies Committee: _____ Date: _____

Senate: _____ Date: _____

CALENDAR INFORMATION:

Department: Chemistry Course Number: 806

Title: Ph.D. Thesis Research Seminar

Description: Critical Evaluation of Written and Oral Thesis Research Reports.

Credit Hours: 3 Vector: _____ Prerequisite(s) if any: CHEM 805.

To be evaluated Satisfactory/Unsatisfactory and counted towards the minimum course requirement

ENROLLMENT AND SCHEDULING:

Estimated Enrollment: 8 When will the course first be offered: 97-1

How often will the course be offered: Annually, in the Spring Semester. CHEM 805 and 806 would be mounted as one course.

JUSTIFICATION:

Would be offered at same time as CHEM 805. This course has been offered since 90-3.

Credit hours have been reduced from 4 to 3 to reflect the preparation time for this course.

RESOURCES:

Which Faculty member will normally teach the course: A team of 3, normally drawn from the Department. Evaluation to be performed by the instructors & the student's supervisory cmte.
What are the budgetary implications of mounting the course: _____

No new faculty or resources are required. Existing CHEM 806 to be dropped.

Are there sufficient Library resources (append details): Yes.

- Appended: a) Outline of the Course
- b) An indication of the competence of the Faculty member to give the course.
- c) Library resources

Approved: Departmental Graduate Studies Committee: [Signature] Date: 6/6/95

Faculty Graduate Studies Committee: [Signature] Date: 9/10/21

Faculty: CHW. Jones Date: 24 April 95

Senate Graduate Studies Committee: [Signature] Date: 20 June 95

Senate: [Signature] Date: _____

CALENDAR INFORMATION:

Department: Chemistry Course Number: 806

Title: Ph.D. Research Seminar

Description: Critical Evaluation of Written and Oral Research Reports.

Credit Hours: 4 Vector: _____ Prerequisite(s) if any: CHEM 805

ENROLLMENT AND SCHEDULING:

Estimated Enrollment: 8 (+12 in CHEM 805) When will the course first be offered: 90-3

How often will the course be offered: Annually, in Fall semester. CHEM 805 and 806 would be mounted as one course.

JUSTIFICATION:

See CHEM 805. A separate course number (806) is required to allow Ph.D. students to take this seminar a second time, if 805 was taken for the M.Sc. degree.

RESOURCES:

Which Faculty member will normally teach the course: A team of 4, normally drawn from the Departmental Graduate Studies Committee.

What are the budgetary implications of mounting the course: No new faculty or resources are required. The present cumulative examination system will be dropped.

Are there sufficient Library resources (append details): Yes.

- Appended: a) Outline of the Course
- b) An indication of the competence of the Faculty member to give the course.
- c) Library resources

Approved: Departmental Graduate Studies Committee: P.W. Perain Date: 16 Feb '89

Faculty Graduate Studies Committee: P.W. Perain Date: 7 March '89

Faculty: _____ Date: _____

Senate Graduate Studies Committee: _____ Date: _____

Senate: _____ Date: _____

Proposed Calendar Changes:-

MSc Program

Degree Requirements

Course work

FROM:- The minimum requirement for the Masters degree consists of 12 semester hours of graduate course credit, including CHEM 801-3 (Student Seminar I) and CHEM 805-4 (MSc Research Seminar). CHEM 805 must be taken at the first opportunity following two semesters registration in the program.

TO:- The minimum requirement for the Masters degree consists of 12 semester hours of graduate course credit, including CHEM 801-3 (Student Seminar) and CHEM 805-3 (Research Proposal Seminar). CHEM 805 must be taken at the first opportunity following registration in the program.

Ph.D. Program

Degree Requirements

Course Work

FROM:- For students entering with a BSc or equivalent: 20 semester hours of graduate course credit, including CHEM 801-3 (Student Seminar I) and CHEM 802-3 (Student Seminar II) and CHEM 806-4 (PhD Research Seminar). CHEM 806 must be taken at the first opportunity following two semesters registration in the program. CHEM 805 will be accepted in place of CHEM 806 for students who have transferred from the MSc program.

For students entering with a Masters degree: 12 semester hours of graduate course credit, including CHEM 802-3 (Student Seminar II) and CHEM 806-4 (PhD Research Seminar). CHEM 806 must be taken at the first opportunity following two semesters registration in the program.

TO:- For students entering with a BSc or equivalent: 20 semester hours of graduate course credit, including CHEM 801-3 (Student Seminar), CHEM 805-3 (Research Proposal Seminar) and CHEM 806-3 (Research Seminar). CHEM 805-3 must be taken at the first opportunity following registration in the program. CHEM 806 must be taken at the first opportunity following 3 semesters registration in the graduate program.

For students entering with a Masters degree: 12 semester hours of graduate course credit, including CHEM 805-3 (Research Proposal Seminar) and CHEM 806-3 (Research Seminar). CHEM 805-3 must be taken at the first opportunity following registration in the program. CHEM 806 must be taken at the first opportunity following 3 semesters registration in the program. CHEM 801-3 (Student Seminar) is optional.

Transfer from the M.Sc. to the Ph.D. Program

FROM:- In addition to satisfying the University requirements, students wishing to transfer from the MSc program to the PhD program without submitting a Masters thesis will be judged by the Graduate Program Committee on the research reports submitted in CHEM 805.

TO:- Transfer from the MSc Program to the PhD program without submitting a MSc thesis must satisfy University requirements, and include CHEM 805 (Research Proposal Seminar). Evidence of research potential will be judged by the Graduate Program Committee.

Graduate Courses.

FROM:- CHEM 801-3 Student Seminar I. Discussion of recent literature through student seminars.

TO:- CHEM 801-3 Student Seminar. Discussion of recent literature in chemistry through student seminars.

FROM:- CHEM 802-3 Student Seminar II. Discussion of recent literature in chemistry through student seminars.

Prerequisite: Chem 801 or Masters Degree

TO: **DELETE FROM CALENDAR**

FROM: CHEM 805-4 MSc Research Seminar. Critical evaluation of written and oral reports.

TO:- CHEM 805-3 M.Sc. and Ph.D. Research Thesis Proposal

FROM:- CHEM 806-4 PhD Research Seminar. Critical evaluation of written and oral research reports.

TO:- CHEM 806-3 Ph.D. Thesis Research Seminar

Prerequisite: CHEM 805.

S.95-49 Appendix

To: Senate
From: Steven Holdcroft, Chemistry GDSC, Chair
Date: September 13, 1995
Subject: SCAP 95-39

I have been notified of an item of concern to the Department of Chemistry on the agenda for the upcoming SCAP meeting (SCAP-95-49). Specifically, a rationale for the proposed changes to the graduate program is missing. I would like to address this concern. Please find attached a memo from myself, addressed to the Chair of the Faculty of Science Graduate Studies Committee, which outlines the need for modifying the current graduate program.

In addition to this, I add the following comments regarding motions (i) to (iv) on item S.95-49.

(i) The GSC felt that the assignment of 4 credits for Chem 805 was not consistent with the expected work load in relation to other course work. The number of credits was changed from 4 to 3; an assignment more appropriate for this course.

(ii) CHEM 806 has been modified and now focuses on thesis research. It was felt that grading a research-base course was extremely subjective. It is the Department's experience that it is difficult to provide a grade which accurately reflects the students performance. It is proposed to circumvent this dilemma by grading the course satisfactory/unsatisfactory.

(iii) Modifications of the graduate program meant that a Ph.D. student entering the program with a B.Sc. degree could, in principle, take 12 credits of seminar courses out of the required 20; or a Ph.D. student entering the program with a M.Sc. degree could, in principle, take all 12 credits as seminar courses. This was deemed an excessive number of seminar courses for this discipline, and thus it was proposed that CHEM 802 (which is similar in format to CHEM 801) be deleted.

(iv) Self-explanatory, given the proposed changes.

All these points were debated at length at the Departmental, Faculty, and Senate Graduate Studies Levels. They were subsequently put forward for recommendation with the belief that that these modifications would satisfy specific comments related to the external review and improve the Chemistry graduate program.

SIMON FRASER UNIVERSITY
CHEMISTRY DEPARTMENT MEMO

TO: M. Winston, Chair Faculty of Science Graduate Studies Committee
From: S. Holdcroft, Chair Graduate Program Committee
Date: March 20, 1995
Subject: Proposed Rescheduling of Courses - CHEM 805/806 and CHEM 801

Last summer the Department of Chemistry underwent an external review. The review committee made several recommendations regarding the graduate program. I bring three of these to your attention.

- Recommendation 16** The Department should implement policies which will reduce the average time for completion of the M.Sc. to two years without reducing standards.
- Recommendation 17** The Department should implement policies which will reduce the average time for completion of the Ph.D. degree to less than 4.5 years without reducing the standards.
- Recommendation 22** The seminar course CHEM 801 and 805 should be retained as requirements for the M.Sc. degree. CHEM 805 should be taken as early as possible and no later than in the fourth semester of the M.Sc. program.

The departmental graduate program committee has proposed a rescheduling of the graduate seminar courses in order to facilitate both transfer from the M.Sc. program to the Ph.D. program and the timely completion of the M.Sc. and Ph.D. degrees. The proposed rescheduling and modification of these courses is attached, together with the proposed calendar changes. This proposal was accepted by the Department at its March 23rd meeting. It is now brought for consideration by the Faculty of Science graduate studies committee.

cc C.H.W. Jones B.M. Pinto
 R.G. Korteling D. Sutton
 T.J. Borgford S. Wolfe

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