

# SIMON FRASER UNIVERSITY

S.84-57

## MEMORANDUM

To..... SENATE

From..... SENATE COMMITTEE ON UNDERGRADUATE STUDIES

Subject..... CHANGES - DEPARTMENT OF CHEMISTRY

Date..... OCTOBER 16, 1984

Action undertaken by the Senate Committee on Undergraduate Studies at its meeting of October 16, 1984 gives rise to the following motion:

MOTION: "That Senate approve and recommend approval to the Board of Governors, as set forth in S.84-57, the following changes

- i) Deletion of CHEM 460-2, Polymer Chemistry  
Deletion of CHEM 464-2, Physical Chemistry of Solutions
- ii) Changes in requirements for Chemistry Major Program
- iii) Change in entry for CHEM PHYS Program"

### FOR INFORMATION

Acting under delegated authority at its meeting of October 16, 1984 the Senate Committee on Undergraduate Studies approved the following:-

- i) Change in description for CHEM 261-3 and CHEM 362-3
- ii) Change of credit hours (vector), title, description and prerequisites for CHEM 469
- iii) Change of prerequisites for CHEM 367-2
- iv) Change of prerequisites for CHEM 371-3
- v) Change of prerequisites for CHEM 218-3

# SIMON FRASER UNIVERSITY

## MEMORANDUM

SCUS 84-22

To..... W. Heath  
..... Registrar  
Subject..... CALENDAR CHANGES

From..... P. Dobud  
..... Assistant to the Dean  
..... Faculty of Science  
Date..... October 4, 1984

Please find attached the documentation relating to calendar changes approved in our Faculty of Science meeting held Monday, October 1, 1984.

I would appreciate it very much if you would place these items on the agenda of the next SCUS meeting for consideration and approval.

### DEPARTMENT OF CHEMISTRY

- a) To approve the changes in calendar description for CHEM 261-3.

From: CHEM 261-3 Physical Chemistry I

Elements of Physical chemistry from a macroscopic point of view. Thermodynamics, equilibrium, phase changes, solutions, elementary kinetics, solution transport properties.

To: CHEM 261-3 Physical Chemistry I

Elements of physical chemistry from a macroscopic point of view. Thermodynamics and its applications to chemical equilibrium, phase changes and the properties of solutions.

Paper F-84-10

- b) Approve the change in calendar description for CHEM 362-3.

From: CHEM 362-3 Physical Chemistry III

Energy distributions, partition functions. Third Law of thermodynamic applications of statistics, kinetic theory of gases, chemistry equilibrium, kinetic rate theories, surfaces and interfaces, electro-chemistry, Deybe-Huckel theory.

To: Energy distributions and elementary statistical thermodynamics, kinetic theory of gases, transport processes, surface chemistry, properties of ionic solutions, electrochemistry.

Paper F-84-10

- c) To approve the change of credit hours, (vector), title, description and prerequisites for CHEM 469.

**From:** CHEM 469-2 Topics in Physical Chemistry.  
Recent developments in physical chemistry (topics will be determined at the time of offering).

Prerequisites: Permission of the Department.

**To:** CHEM 469-3 Selected Topics in Physical Chemistry.

This course will cover topics such as chemical kinetics, physical chemistry of polymers, thermodynamics of solutions and other aspects of modern physical chemistry.

Prerequisites: CHEM 261-3; CHEM 361-3 and/or CHEM 362-3 may be required or recommended. Permission of the Department.

Paper F-84-10

- d) To approve the deletion of CHEM 460-2 Polymer Chemistry and CHEM 464-2 Physical Chemistry of Solutions from the course offering listing of the chemistry department.

Paper F-84-10

- e) To approve the change of prerequisites for CHEM 367-2 Physical Chemistry Laboratory II.

**From:** CHEM 366-2

**To:** CHEM 361-3 (or PHYS 385-3) and CHEM 366-2.

Paper F-84-11

- f) To approve the change of prerequisites for CHEM 371-3 Chemistry of the Environment I.

**From:** CHEM 232-3 (or CHEM 333-3), CHEM 251-3, CHEM 261-3

**To:** CHEM 251-3 and CHEM 261-3.

Paper F-84-11

- g) To approve the following changes in the courses required for the Chemistry Major Program:

Math required courses

**From:** MATH 151, 152, 251, 310 plus one of 232, 252.

**To:** MATH 151, 152, 251, 310 and 232

Physics required courses

**From:** PHYS 120, 121, and 6 credits from PHYS 131, 211, 221, 233.

**To:** PHYS 120, 121, 211 and 3 credits from PHYS 131, 221, 233.

Paper F-84-11

- h) To approve the change of prerequisites for CHEM 218-3.

**From:** CHEM 105-3, CHEM 118-2 is strongly recommended.

**To:** CHEM 105-3, CHEM 118-2

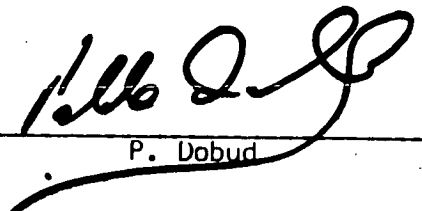
and

To insert in the entry for the CHEM PHYS Program:

CHEM 118 may be waived as a prerequisite for CHEM 218 for Chemical Physics students.

Paper F-84-12

/mgj  
Encls./

  
P. Dobud

## SIMON FRASER UNIVERSITY

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## MEMORANDUM

To Bob Frindt, Chairman, Science Faculty

From E. Kiehlmann, Chairman - Chemistry

Undergrad. Studies Committee

Undergrad. Studies Committee

Subject Phys. Chem. Curriculum changes

Date 26 June 84

The Chemistry Department has approved the following changes in the physical chemistry undergraduate curriculum:

- a) Chem. 261-3 and Chem-362-3.  
Minor changes in calendar description (as attached)
- b) Replacement of Chem-469-2 - Topics in Physical Chemistry  
by Chem-469-3 - Selected Topics in Physical Chemistry
- c) Deletion of Chem 460-2, and 464-2

Rationale:

The proposed changes are intended to provide integrated coverage of the basic principles of physical chemistry at the second- and third-year level (Chem. 261, 361, 362) and a choice of advanced topics at the senior level (Chem 469). In the past, the two-credit fourth-year courses (Chem. 460, 461, 464, 469) generally had low enrolments thus not justifying their continued regular presentation under specific titles. Chem. 469-3 will be given at least once a year, and the topics covered in a given semester will be announced in the Preregistration Handbook. Since special topics courses with different subtitles (but identical course number) are considered as separate entities on the Registrar's records, students specially interested in physical chemistry may complete two (or even three) such courses for a total of six (or nine) Chem. 469 credits.

*E. Kiehlmann*

E. Kiehlmann

Enclosures

EK/fb

SIMON FRASER UNIVERSITY

MEMORANDUM

F-84-11

f. 1-8  
B.

To.....Bob Frindt, Chairman.....  
.....Faculty Undergrad. Curriculum Co.....  
.....Committee  
Subject.....CHEM. Calendar Changes.....

From.....E. Kiehlmann, Chairman.....  
.....Chem. Undergrad. Studies.....  
.....Committee  
Date.....July 3, 1984.....  
File: C.3572. D.60

In addition to the changes in our physical chemistry courses mailed to you earlier, the Chemistry Department has approved the following calendar revisions:

- g) Required MATH courses for Chemistry Major:  
change from MATH 151, 152, 251, 310 and (232 or 252)  
to MATH 151, 152, 251, 310 and 232.

Rationale: The Math Department has proposed to make MATH 232 a pre-requisite for MATH 252.

- 4) Required PHYS courses for Chemistry Major:  
change from PHYS 120, 121 and 6 credits from PHSY 131, 211, 221, 233  
to PHYS 120, 121, 211 and 3 credits from PHYS 131, 221, 233.

Rationale: PHYS 211 has always been a prerequisite for CHEM 361, a core course in the CHEM Major program.

- e) Prerequisites for CHEM 367-2:  
change from CHEM 366  
to CHEM 361 (or PHYS 385) and 366.

Rationale: CHEM 361 is needed to understand the experiments in CHEM 367.

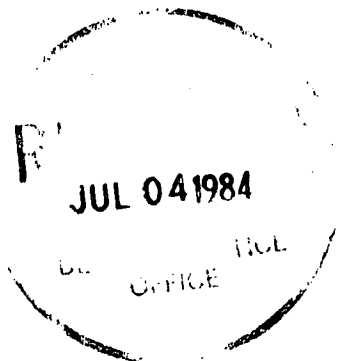
- f) Prerequisites for CHEM 371:  
change from CHEM 232, 251, 261  
to CHEM 251 and 261.

Rationale: The inorganic chemistry background is not essential for CHEM 371.

*E. Kiehlmann*

E. Kiehlmann

EK:pd



## SIMON FRASER UNIVERSITY

F-84-12

## MEMORANDUM

To..... P. Dobud  
..... Dean of Science Office  
Subject..... Chem. Calendar Changes and  
..... Graduands

From..... E. Kiehlmann, Chairman  
..... Dept. Undergrad. Studies Co.  
Date..... September 10, 1984  
..... File: C.3756, D.62

The following additional Calendar changes have been approved by the Chemistry Department and are now submitted for approval to the Science Faculty:

A.) Prerequisites for CHEM.218-3:

Change from: CHEM.105-3; CHEM.118-2 is strongly recommended,  
to: CHEM.105-3, 118-2.

Rationale: To accommodate students already in the program at the time of introduction of CHEM.218-3 (and concurrent change of CHEM.117-2 to CHEM.118-2), CHEM.118 was not immediately made a prerequisite. Both courses are in the Chemistry, Bio-chemistry and Premedical core program and should be taken in the prescribed order. CHEM.118 may be waived as prerequisite for CHEM.218 for Chemical Physics students, and a statement to this effect will appear in the Chemical Physics program section of the Calendar.

*E. Kiehlmann*

E. Kiehlmann

EK:pw