

SIMON FRASER UNIVERSITY

S.85-28

MEMORANDUM

To... Members of Senate.....

From Office of the Dean of Graduate Studies.....

Subject Curriculum Changes, Department of.....
Chemistry

Date April 25, 1985.....

Action undertaken by the Executive Committee of the Senate Graduate Studies Committee at its meeting on April 22, 1985, gives rise to the following motion:-

MOTION:

"That Senate approve and recommend approval to the Board of Governors, as set forth in S.85-28 the proposed curriculum changes in the Department of Chemistry,

- (1) To approve the deletion from the Calendar of the following courses:

CHEM 864-3	Photochemistry
CHEM 865-3	Kinetics and Mechanism
CHEM 866-2	Surface Chemistry
CHEM 867-3	Polymer Chemistry
CHEM 872-3	Selected Topics in Theoretical Chemistry

- (2) To approve the course proposals for the following new courses:

- (a) CHEM 860-3 ADVANCED PHYSICAL CHEMISTRY

A review of concepts in physical chemistry, with emphasis on molecular aspects of quantum chemistry, spectroscopy and chemical kinetics.

- (b) CHEM 869-3 SELECTED TOPICS IN PHYSICAL CHEMISTRY

A specialized area of physical chemistry will be treated, selected from a list of topics.

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(3) To approve the change of the title and calendar description for the following courses:

(a) From: CHEM 861-3 Advanced Molecular Spectroscopy
Rotational, vibrational, and electronic spectra of polyatomic molecules; principles of magnetic resonance.

To: CHEM 861-3 Photochemistry and Chemical Kinetics
Chemical kinetics with emphasis on the reactions of free radicals and excited species. Basic principles of photochemistry and its application to some simple processes involving (a) atoms, and (b) molecules.

Note: CHEM 861-3 may not be taken for credit by students who have completed CHEM 865.

(b) From: CHEM 862-3 Statistical Thermodynamics
Ensembles and thermodynamics; application to independent systems; systems of interacting molecules; quantum statistics. Topics in advanced thermodynamics, including non-equilibrium thermodynamics.

To: CHEM 862-3 Macromolecular Chemistry
Physical properties and characterization of macromolecules. Relationship between structure and properties. Kinetics of polymerization.

Note: CHEM 862-3 may not be taken for credit by students who have completed CHEM 867.

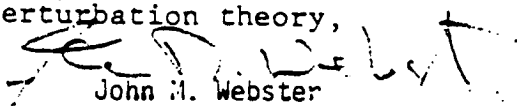
(c) From: CHEM 863-3 Selected Topics in Physical Chemistry

Subjects to be discussed will vary from semester to semester. Current trends and research effort will be stressed, and considerable use of the original literature will be encouraged.

To: CHEM 863-3 Magnetic Resonance
Principles, techniques and applications of NMR and ESR.

(d) From: CHEM 871-3 Theoretical Chemistry
Introduction to quantum mechanics. Non-relativistic quantum mechanics. Atomic structure, perturbation, theory, Hartree-Fock, variational method. Some recent developments.

To: CHEM 871-3 Quantum Chemistry
Non-relativistic quantum mechanics. Atomic and molecular structure, perturbation theory, variation method.


John M. Webster
Dean of Graduate Studies