

## FACULTY OF SCIENCE

NEW COURSE PROPOSALI CALENDAR INFORMATION

Department: Chemistry

Course Number: 105-3 Title:

Sub-title or Description: General Chemistry II - Chemistry of representative groups - oxygen, nitrogen, boron and carbon groups. Energy and chemical reactions; chemical equilibria, free energy, and electrochemical cells. Chemical kinetics. Nuclear chemistry. Transition metal chemistry.

Credit Hours: 3

Vector Description: (3-1-0)

Pre-requisite(s): Chemistry 104-3. Mathematics 152-3 and Physics 201-2 (or Physics 102-3) should ordinarily be taken concurrently. Chemistry 117-2 is normally taken concurrently by students intending to proceed to 200 level Chemistry courses.

II ENROLMENT AND SCHEDULING

Estimated Enrolment: Spring 100 Summer 25 Fall 60

Semester Offered (e.g. Yearly, every Spring; twice yearly, Fall and Spring):

Every semester.

When course will first be offered: Spring '71.

III JUSTIFICATION

A. What is the detailed description of the course including differentiation from lower level courses, from similar courses in the same department and from courses in other departments in the University?

Chemistry 104-3 and Chemistry 105-3 replace the present courses Chemistry 102-3 and 103-3; 104 - 105 represent an integrated freshman sequence which contains more comparative chemistry (at the expense of various aspects of physical chemistry) than the present courses. The sequence through Chem 251 for students with Chemistry to B.C. Grade 12 becomes 104 - 105 - 251. Students without high school chemistry enter at Chem 101 before proceeding to 104.

B. What is the range of topics that may be dealt with in the course?

See calendar description above under I.

C. How does this course fit the goals of the department?

Chem 105-3 is designed as the second semester offering in an integrated two-semester freshman sequence.

D. How does this course affect degree requirements?

No change from present for Chemistry major students. Biology and Kinesiology majors will take both Chemistry 104 and 105 prior to Chem 251.

E. What are the calendar changes necessary to reflect the addition of this course?

Deletion of present Chem 103 description. Insertion of Chem 105 description as above.

F. What course, if any, is being dropped from the calendar if this course is approved?

Chem 103-3

G. What is the nature of student demand for this course?

Estimated enrolment is 185 students per year over 3 semesters.

H. Other reasons for introducing the course.

IV

BUDGETARY AND SPACE FACTORS

A. Which faculty will be available to teach this course?

All faculty could teach Chem 105-3.

B. What are the special space and/or equipment requirements for this course?

No change from present Chem 103.

C. Any other budgetary implications of mounting this course:

None

APPROVAL - Faculty Undergraduate Curriculum Committee: MARCH 31, 1970

Faculty: APRIL 20, 1970

Senate: