### 5.360 c

FACULTY OF SCIENCE

NEW COURSE PROPOSAL

Department: Chemistry
Course Number:105-3Title:
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. Chemistr: 117-2 is normally taken concurrently by students intending to proceed ENROLMENT AND SCHEDULING to 200 level Chemistry courses.

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 ${ }^{171}$.

## 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 whic contains more comparative chemistry (at. the expense of various aspects of physical whemistry) than the present courses. The sequence through Chem 251 for students school Chemistry to B.C. Grade 12 becomes 104-105-251. Students without high
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.

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
1

APPROVAL - Faculty Undergraduate Curriculum Committee: MARCH 31,1970
Faculty: APRU 20, 1970

Senate:

