

Westminster College
New Wilmington, Pa.

DEPARTMENT OF
CHEMISTRY

Committee Report on: The Setting of Chemistry in the College Curriculum

At the first meeting of this committee four areas were suggested for study:

1. the ACS accreditation of Chemistry in the liberal arts college, 2. terminal courses in Chemistry, 3. the philosophical and religious implications of courses in Chemistry, and 4. the minimum requirements in science for non-science majors (B.A.).

Section 1. ACS Accreditation

The problem of ACS accreditation involves certain adjustments in our curricular offerings in Chemistry. The importance of its consideration is due to several factors: namely, (a) some alumni request it; (b) it may aid in recruitment of chemistry students for the college; (c) industry furnishes scholarships to ACS approved colleges; (d) the ACS is sending lists of ACS approved colleges to high schools which serves to distinguish between colleges.

Various individual opinions or experiences were expressed by members of the committee regarding the desirability of ACS accreditation. Some of these are as follows: (a) Graduation from an ACS approved school does not insure high quality of future work in graduate school or industry; (b) Graduation from an ACS accredited college is not demanded by industry for employment, nor do graduate schools demand ACS accredited graduates; (c) national accrediting agencies object to one agency evaluating the work of a single department in a college; (d) generally, administrators in colleges are not interested in ACS accreditation unless pressure is brought to bear.

In summarizing, ACS accreditation serves to stimulate the quality of chemistry taught in colleges. Some schools may seek it, whereas others feel that it imposes too severe restrictions on the curriculum. In some instances ACS accreditation aids the student in obtaining more desirable employment and entrance credits into graduate school.

Section 2. Terminal Courses in Chemistry.

Various problems are involved in offering a terminal course in chemistry. Some of these are as follows: (a) the nature and time distribution of the subject matters, (b) the poor mathematical background of many students, (c) the matter of student enthusiasm, (d) the selection of a suitable text, and (e) the problem of deciding what students are eligible for a terminal course in Chemistry.

Some of the individual opinions expressed by the group were as follows: (a) the course should consist of a study of the impact of Chemistry on the physical and organic world; (b) it should develop the philosophical concept of Chemistry and science in relation to man; (c) a simple dynamic text should be used; (d) laboratory work should be made as dynamic, direct and vital as possible.

In summarizing, the group felt that there is a definite place for a terminal course in Chemistry. It requires the best of teaching with careful selection of material and of means for effective presentation.

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Section 3. Philosophical and Religious Implications

The committee considered the relation of the study of Chemistry to the area of religion. The opinions were varied. The members realized that there are philosophical and religious implications involved in the study of Chemistry, but each member felt inclined to develop these with his students in his own way.

Section 4. Minimum Science Requirements for Non-Science Majors (A.B.)

The representatives of the various colleges in this group first reported on the science requirements for non-science majors in their own schools. Eight out of twelve colleges require eight hours of science with laboratory work, and four require twelve hours of science with laboratory work. One school will substitute mathematics or geology for the science requirement, and proficiency examinations in one school are used to indicate fulfillment of the science requirement.

The group considered laboratory work in science to be more effective than demonstration work alone. It was felt that the completion type of laboratory report was unsatisfactory, the use of special written forms and frequent laboratory examinations being superior. The suggestion was made that more reference work should be required to vitalize and broaden the scope of the course.

There was a general recognition that all B.A. candidates should be required to take science with the inclusion of laboratory work.

Name	Committee	Institution
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Arthur A. Sunier		Carroll College
J. Oliver Collins, Secretary		Westminster College
Walter S. Long		Taylor University
George H. Reif <i>Reed</i>		Knox College
Rev. Peter P. Pritzl		St. Norbert College
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