

an intensive faculty seminar covering the course material, as well as the pedagogical difficulties which might be expected in the course. Example: The CUPM recommended course in multivariate calculus using differential forms.

- (b) A department which is planning a thorough curriculum revision might seek a consultant to act essentially as a member of its curriculum committee, taking part in its discussions of courses, texts, staffing problems, library, etc.

Those who wish one or more visits by a CUPM consultant should not be deterred by lack of funds; an applicant's financial ability to support the program is not a factor in approving applications. For details of the programs and an application form, write to CUPM, Box 1024, Berkeley, California, 94701.

CUPM REPORT: A COURSE IN BASIC MATHEMATICS FOR COLLEGES

In January, 1970, the Committee on the Undergraduate Program in Mathematics (CUPM) initiated a study concerning curricular problems for those students who are deficient in basic mathematics. There is a sizeable number of college students enrolled in mathematics courses below the level of college algebra and trigonometry, and it is CUPM's belief many of these students can be greatly helped by a reform in this lower level of the mathematics curriculum. Accordingly, CUPM has now prepared a report, *A Course in Basic Mathematics for Colleges* (referred to as Mathematics E).

It is proposed that some of the currently existing basic mathematics courses be replaced by this flexible one-year course, together with an accompanying mathematics laboratory. The laboratory would serve to remedy the students' arithmetic deficiencies, offer added opportunity for drill in algebraic manipulations and allow for instruction in several vocational-oriented topics. The main aim of this course will be to provide the students with enough mathematical literacy for adequate participation in the daily life of our present society.

Many of the students in standard basic mathematics courses have seen the same material in elementary and secondary schools, and it is often the case that this second exposure is no more successful than the first. Thus, a new and more appropriate approach is needed to meet the needs of college students.

In Mathematics E it is recommended that flow-charting and algorithmic and computer-related ideas be introduced early and used throughout. This should give the student a technique in the analysis of problems and encourage him to be precise in dealing with both arithmetic and non-arithmetic operations. Topics of everyday concern, such as how bills are prepared by a computer, calculation of interest in installment buying, quick estimation, analyses of statistics appearing in the press, and various job-related algebraic and geometric problems, are mainstays of the course.

In order to make the recommendations as clear as possible, a topical outline, with an extensive commentary, is given. However, the outline should be viewed more as a flexible model rather than a rigid description; the spirit of the course is more important than content. The model outline contains flow charts and elementary operations, rational numbers, geometry I, linear polynomials and equations, the computer, nonlinear relationships, geometry II, statistics, and probability.

A Course in Basic Mathematics for Colleges is available without charge from CUPM, P.O. Box 1024, Berkeley, California 94701.