

THE DEPARTMENT OF THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

The curricula of our colleges of pharmacy are receiving careful study at this time, because we go to the four-year course in 1932. The following three papers by Deans Muldoon and Leigh and Professor Gathercoal discuss the place that three different subjects should occupy in our curricula and are therefore very timely.—C. B. JORDAN, *Editor*.

A COURSE IN DRUG ANALYSIS.

BY HUGH C. MULDOON.*

I. Shall the Course Be Given?—Is a knowledge of drug analysis of value to the pharmacist? Work of this character is specified in the suggested two-, and three-year courses outlined in the Pharmaceutical Syllabus. Those schools which do not now offer a separate course in drug analysis, give a considerable portion of the work in other courses.

The work is intrinsically valuable. It improves technique. The course provides a review of the work of other courses. It presents no unusual teaching problems.

II. When Shall the Course Be Given?—Since the work may utilize the student's knowledge of inorganic chemistry, qualitative analysis, organic chemistry, quantitative analysis, mathematics, biology, pharmacognosy and other courses, its proper place seems to be in the work of the last year. It is so placed in the Syllabus. What shall be its position in the four-year curriculum?

III. Shall the Work Be Given as a Separate Course?—The work of drug analysis is both qualitative and quantitative in character. Shall a considerable portion of the quantitative work of drug analysis be used as a means of teaching quantitative analysis, or shall this course follow a course in general quantitative analysis? The latter plan is effective. It will probably be followed in the university schools where the department of chemistry teaches quantitative analysis for the school of pharmacy. A similar plan works well when a course in general inorganic chemistry is followed by a course in the pharmaceutical applications of inorganic chemistry.

IV. Content and Time.—The selection of material for this course must depend upon the time available and the amount of analytical work that is to be given in other courses. Those schools which offer a separate course allow from three to six semester hours for this work. The Pharmaceutical Syllabus suggested 50 clock hours as a minimum under the two-year course. With the change to the three-year curriculum there was no increase in hours. What shall be the minimum number of hours to be devoted to a course in drug analysis under the four-year plan?

Material is not lacking. The United States Pharmacopœia and the National Formulary supply far more work than can be covered in the usual short course. This is true even when such exercises as alcohol determination; viscosity; melting, congealing and distilling points; and the detection and identification of alkaloids are included in the laboratory work of organic chemistry; when the arsenic tests, the tests for heavy metals, and the qualitative tests for the identity and purity of inorganic chemicals are performed in qualitative analysis; when the microscopic

* Duquesne University.