Objectives, Content, and Teaching Procedures in the Beginning Courses in Soils

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To insure the future development of soil science, it is essential that advances in research be matched by advances in teaching. Good teaching is necessary to maintain our present standards of research; poor teaching will ultimately lower its quality. The successful teacher of today lays a firm foundation for the research of tomorrow.

Before embarking on a discussion of the objectives, content, and procedures used in teaching introductory soil science at Michigan State College, it is necessary to explain how these courses fit into the agricultural curriculum as a whole. The relationship between the agricultural curriculum and the recently established Basic College is also of interest because the inception of the latter forced some revision of old concepts and resulted in a modification of previously accepted pedagogic ground-rules. Among these changes was the abandonment of the more or less traditional 5-credit introductory soil science course offered during the third term of the sophomore year. Substituted in place of this 5-credit course were two courses, an introductory survey course of 3 credits occurring in the freshman year, followed by a 2-credit course in the second or early part of the third year.

The initial soil science course now offered at Michigan State College carries 3 credits and meets 5 hours a week, of which 3 hours is classroom work and 2 hours laboratory or field work. It is given during the freshman year before most students take chemistry and is required of all general agricultural and forestry majors. General agriculture students are required to continue with the second 2-credit course which has chemistry as prerequisite. In this course 2 hours a week are devoted to lectures and 2 hours to laboratory and field exercises. These two constitute the beginning soils courses and are the foundation on which the advanced work is based.

In this connection it is of interest to mention a change in the agricultural curricula which was instituted some time prior to the adoption of the Basic College plan. The change was brought about by the great difficulty many freshmen encountered in chemistry, which abruptly and early terminated the college careers of a large number of students. To ameliorate this condition more agricultural courses were placed in the freshman year, while chemistry was delayed until the early part of the second year. This change in policy, which emphasized survey courses for freshmen, resulted in a great improvement in undergraduate work in the sciences and particularly in chemistry, because the students were able to see a direct practical application of chemistry in agriculture. This new policy was successful enough to

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