

1-1-1920

The Forestry Course at the Iowa State College

Iowa State College Forestry Club

Follow this and additional works at: <http://lib.dr.iastate.edu/amesforester>



Part of the [Forest Sciences Commons](#)

Recommended Citation

Iowa State College Forestry Club (1920) "The Forestry Course at the Iowa State College," *Ames Forester*: Vol. 6 , Article 17.
Available at: <http://lib.dr.iastate.edu/amesforester/vol6/iss1/17>

This Article is brought to you for free and open access by Iowa State University Digital Repository. It has been accepted for inclusion in Ames Forester by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

THE FORESTRY COURSE AT THE IOWA STATE COLLEGE

The forestry course at the Iowa State College has developed as the need of forestry training became more pronounced. The present course represents the changes and additions of twenty years. In fact, as early as the year 1879 a course of forestry was taught which made use of Bryant's "Forest Trees" as a text. At this early date the college was maintaining forestry plantations and a nursery for instructional and experimental purposes. Also a collection of American and exotic woods had been accumulated for instructional purposes. In 1880 the college had a department of instructor of Horticulture and Forestry. At this time this combined course included a subject, "The general principles of forestry," which required Fuller's text. Up to the year 1904 the forestry work offered at the college was general, including the principles of the subject, identification of trees, woods, etc., and it was in 1905 when the more specialized work in forestry began to be developed. At this date, in addition to a general course in farm forestry offered to the agricultural students, the students of horticulture and forestry were offered separate courses in elementary forestry, silviculture, forest management and policy, and wood technology. From 1905 to the present time, many additions and changes have been made in keeping pace with the rapid development of the forestry profession.

In the development of the forestry work at the Iowa State College it has been the purpose of the institutions to meet the needs of both the state and nation in this important field. This means that the forestry work as now outlined provides for general instruction in farm forestry for the students in the various courses in the division of agriculture and also for a thorough technical training for forestry students who expect to make forestry their professional work.

At the present time a four-year technical course in forestry, leading to the degree Bachelor of Science in Forestry, is offered. An additional year of graduate study, for those desiring advanced work, leads to the degree Master of Science in Forestry.

In the technical course in forestry provision is made for a good grounding in general and fundamental subjects which every college graduate should have. The necessity of not permitting the strictly technical subjects to crowd out the fundamental non-technical work is recognized, since the student who over-emphasizes the technical branches at the expense of other important subjects is often seriously handicapped after leaving college.



Central.

The technical forestry course is open to all students who have had sufficient preliminary training to admit them to a college or university of first rank. This means that the course is open to graduates of standard high schools.

In the first year of the technical course the work is mostly fundamental or non-technical. Throughout the three quarters of this year the student is given a general subject in forestry, the purpose of which is to outline the field of forestry. English and general chemistry are also continued through the entire first year. General Botany is included in the first two quarters, which lays a foundation for the later botanical work of the course. A preliminary course in surveying is offered in the third quarter of this year, as a foundation for the three courses in surveying in the second year. A course in mechanical drawing and courses in college algebra and trigonometry make up the balance of the work for the first year of the forestry course.

At the conclusion of the freshman year the technical forestry students go to summer forestry camp which continues for a period of three months. The camp is usually conducted on a National Forest either in the Lake States, Rocky Mountains or Western States, where forest conditions and operations may be

studied to best advantage. This summer work consists of timber estimating and mapping, scaling logs, marking timber, type studies and other field work. The purpose of this work is to give the beginning forester some actual experience in practical forestry work.

In the second year of the course a number of strictly technical subjects are given. These are forest mensuration, dendrology, logging and lumbering, silviculture and forest nursery and planting. A practical course in surveying is carried through the entire year, which gives the student thorough work in this branch. Applied organic chemistry is taken for two quarters of the year and courses in plant physiology and history complete the work of the second year.

In the third year technical courses are offered in the minor forest industries, timber preservation, study of woods, forest soils, chemistry of forest products, ecology and forest mapping. The technical work of this year is supplemented with courses in general entomology, landscape architecture, systematic botany, physics, technical journalism and public speaking.

At the close of the third or junior year the student selects one of two groups to complete for the fourth year. These groups—forest management and lumber marketing, have a number of studies in common, including forest management, forest valuation and finance, history of forestry, municipal forestry, forest economics, timber testing, forest pathology, general bacteriology, and forest insects.

In addition to the above the forest management group includes physics of forest soils, general geology, and shade and



State Field.

street tree management. The lumber marketing group of the senior year, in addition to the subjects common to both groups, includes woods of commerce, lumber markets, and business law.

During the third and fourth years a student who desires to specialize in some branch of forestry or closely allied work is given an opportunity to substitute other work for certain courses, provided this has the approval of the faculty. This permits students to elect more work to fit them for grazing positions, work in forest products, forest pathology and other lines.

Throughout the entire four years of college work the students meet once a week to discuss topics of current interest in the field of forestry. Before graduation the student must supplement his training with at least three months of practical work on a national forest or in other forestry work.

Students desiring to complete the work for the degree Master of Science in Forestry, continue for one year in advanced subjects and research courses. This additional year permits the student to secure preparation along the special line of forestry work which he is to follow.

In brief, the forestry course at the Iowa State College is designed to give the student a good grounding in the various branches of forestry but at the same time to include sufficient fundamental work in other branches to give him a well rounded out college education. The importance of linking up the theoretical with the practical is in keeping with the college motto "Science with Practice."

