marketing, and veterinary science. Following the Christmas recess the work is resumed December 31 and the following weeks will be devoted to butter making, cheese making, ice cream making and market milk. The student will have an opportunity of taking or electing two of these subjects in the last six weeks. No person will be eligible to take the second half of the course unless a satisfactory record has been made in the first six weeks. Those who have had a dairy course at Wisconsin or equivalent training are eligible to take the last half of the course or any three weeks part thereof and will not be required to take the first six weeks work.

FIRST SEMESTER November 11 to December 21

DAIRY BACTERIOLOGY

The relation of bacteria to milk and its products. Instruction is given in the care and handling of milk and the relation this bears to the quality of products manufactured from it. The methods of determining undesirable bacteria in milk, the different kinds of fermentation that occur, and the use of pure culture starters will be studied.

Lecture Room 314, Agricultural Hall, Tuesday and Thursday 9-10. Laboratory periods, Agricultural Hall, Room 216, Section A. Tuesday and Thursday 10-12. Section B, Tuesday and Thursday, 1-3. (E. G. Hastings).



STUDENTS ANALYZING MILK PRODUCTS

MILK COMPOSITION AND TESTS

This course will cover the composition and secretion of milk and the factors affecting it. Instruction will be given in the use of the Babcock test, acid test, lactometers, salt tests, moisture tests, and enough dairy chemistry will be included to explain the theories underlying these tests and the changes that take place in milk and its products.

Lectures: Tuesday, Wednesday, Thursday, Friday 8-9. Dairy lecture room 302. Laboratory; Dairy Testing Laboratory, Room 204, Section A, Monday, Wednesday and Friday 10-12. Section B, Tuesday, Thursday, Saturday 10-12. (H. C. Jackson and K. G. Weckel).

DAIRY MECHANICS

Instruction will be given in the operation of boilers, gas and steam engines, soldering, pipe-fitting, belt lacing, installation and arrangement of machinery, use of exhaust steam, reading blue prints and drafting, refrigeration and the principles and practices involved in the operation of a plant from the dairy engineering standpoint. Lecture Dairy Building, Room 302, Wednesday, Friday, 9-10, Saturday 8-9, Laboratory; Dairy Mechanics Laboratory, Room 303, Section A. Monday 1-3, Tuesday 3-5, Wednesday 1-3, Friday 1-3, Saturday 10-12. Section B Monday 10-12, 3-5, Wednesday 10-12, Thursday 3-5, Friday 10-12. (L. C. Thomsen and F. E. Hanson).

DAIRY ARITHMETIC AND BOOKKEEPING

Instruction will be given in the methods of solving the various problems in arithmetic that ordinarily arise in the dairy plant, such as deal with yields, standardization, fat and solids calculations, methods of paying for milk and manufacturing record keeping. Particular emphasis is placed on management problems. In addition to this, a set of dairy plant accounts will be kept by the student.

Laboratory; Dairy Lecture Room 302. Section A Monday 3-5, Tuesday and Thursday 1-3. Section B. Monday, Wednesday and Friday 1-3. (L. C. Thomsen).

MARKETING

The marketing of butter; American and foreign cheese; and fluid milk; the factors affecting the price of dairy products; the importance of quality, trade brands and sales policy; storage; imports and exports; and cooperative marketing. Dairy Lecture Room 302, Monday 9-10. (M. A. Schaars).

VETERINARY SCIENCE

A series of lectures on the common diseases of dairy cattle. Various stable and laboratory tests for detecting mastitis (garget) are demonstrated to help students understand the importance of this disease and how to improve the quality of raw milk. Genetics Bldg. Lecture Room, Monday 8-9. (F. B. Hadley).

SECOND SEMESTER

DECEMBER 31 TO JANUARY 18, AND JANUARY 18 TO FEBRUARY 8

During the second semester the student is urged to select two of the subjects listed, but will be permitted to take just one subject if he chooses.

CREAMERY OPERATION AND MANAGEMENT

Dec. 31, 1935-Jan. 18, 1936

H. C. JACKSON, L. C. THOMSEN, H. T. SONDERGAARD AND G. HAGBERG

This course deals chiefly with the manufacture of butter and the management of a creamery. Instruction is given in the handling of milk and cream from the time it is received until the products made from it are sold in the finished package.

Practice will be given in weighing, grading and sampling milk and cream; operating power separators, fore-warmers, milk heaters, cream pasteurizers and ripeners, and different types of factory churns. The student will receive instruction in the pasteurization of cream, neutralization of cream, ripening of cream and the culture and use of a starter. During the churning exercises, composition control will be demonstrated and daily tests for fat, moisture and salt will be made on the butter churned before it is printed.

Throughout the course daily records will be kept and special emphasis will be placed on the checking of factory losses and the necessity of improving the milk and cream supply by frequent scoring of cream and judging of butter.

This work is carried on in the dairy department creamery where power equipment of the latest design is used.

Lectures in the Dairy Lecture Room 302, daily 3-4. Laboratory, daily 8-12, and 1:30-3:00.