

# The special course for operators and managers of creameries and cheese factories, February 5-10, 1917. 1917

University of Wisconsin. College of Agriculture Madison, Wisconsin: University of Wisconsin, 1917

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BULLETIN OF THE UNIVERSITY OF WISCONSIN Serial No. 821; General Series, No. 617

W-Bulleting.

# THE SPECIAL COURSE

#### FOR

# **OPERATORS AND MANAGERS**

#### OF

## CREAMERIES AND CHEESE FACTORIES



DAIRY BUILDINGS AT THE UNIVERSITY OF WISCONSIN

## February 5-10, 1917

MADISON Published by the University January, 1917

Entered as second class matter June 10, 1898, at the Post Office at Madison, Wisconsin, under the Act of July 16, 1894. Issued monthly by the University of Wisconsin, Madison, Wis.



#### COMMERCIAL BUTTER JUDGING

State-wide butter and cheese scoring exhibitions at the Dairy School give fine demonstrational lessons.

## SPECIAL DAIRY COURSE

## Announcement

At no time in the history of dairying have the managers and operators of creameries and cheese factories had more vital questions to discuss than now.

The high prices of both butter and cheese make it necessary to give close attention to the quality of these products and to the profitable use of all the by-products made at these factories.

The moisture content of butter and of cheese is something that must be thoroughly understood both as to its influence on the yield and quality of butter and cheese and the effect of accurate methods of testing on the results obtained.

The use of pepsin instead of rennet has become necessary in cheese making to some extent and the pasteurizing of cream for buttermaking as well as the making of casein from skim milk are among the new and important questions for creamery men to consider.

All divisions of the dairy department will be in full operation during the week of this special course and conferences of special interest to the creamery, cheese factory, ice cream and market milk makers and managers will be held each day.

**Creamery Butter Making.** The creamery is supplied each day with several loads of cream and milk from farms and stations within ten miles of the school. A number of churnings will be made to illustrate certain points in the manufacture of butter. The cream received will be graded, tested, and pasteurized, by both the holder and the continuous processes. The school is well supplied with a variety of the pasteurizing machines now in common use in creameries throughout the country.

Cream ripening starters will be made and used in the pasteurized cream, which will be churned and the butter worked in various ways to illustrate the effect of certain treatments on the water content and the leaky texture of butter.

Butter makers are requested to bring one or more packages of butter from the home factory where the process of making

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may have been varied to illustrate some common defect noticed at that particular factory.

**Cheese Making.** Several important practical points have been developed in the cheese making experiments carried on at the Dairy School during the past few years.

During this special course, cheese will be made daily so that the experienced cheese maker can follow the process from beginning to end and pass judgment on the applications of these new suggestions to his work.



TESTING AND PACKING BUTTER Accuracy and neatness in packing helps sell good butter

Some of the points to be emphasized are the following:

1. The influence of moisture content of the curd on the quality of the cheese. Testing cheese for moisture.

2. Testing strength of commerical pepsin.

3. Pasteurized milk cheese. A good supply of pasteurized milk cheese for scoring will be on hand and the characteristic uniform quality, as well as the increase in yield of such cheese will be discussed.

4. Paying for milk by its test at cheese factories. A new plan of payment for rich and thin milk at the same factory has been worked out and this will be discussed in detail as well as a simple method of keeping the cheese factory daily records.

Swiss Cheese Making. Swiss cheese makers will be given special instruction in milk testing and in the detection of skimming and watering of milk.

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Ice Cream Making. Both the continuous and the stationary types of ice cream freezers will be in use and a conference of ice cream makers held each morning. Among the points to be discussed will be the following:

- 1. A new method of determining the overrun.
- 2. Influence of overrun on quality of ice cream.
- 3. The use of pasteurized cream for ice cream making.
- 4. Milk solids other than butterfat for use in ice cream making.
- 5. A demonstration of the use of the emulser.



ICE CREAM MAKING An industry of growing importance

#### **OUTLINE OF COURSE**

#### Monday, February 5

- 1. Creamery men, Room 103
- 2. Cheese Factory men, Room 102
- 3. Ice Cream men, Dairy Bldg. Annex
- 2-4 Starter Making at Dairy Building, Room 203
  - A number of "pure culture" starters will be discussed and propagated for inspection daily during the week,

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#### 7:30 Address. Illustrated with motion pictures in the Auditorium, Agricultural Hall......DR. A. S. ALEXANDER

#### **Tuesday**, February 6

8:00 Inspection of Starters made previous day. Room 203 Dairy Bldg.

9:00 Buttermaking in the Creamery from sweet cream

A. C. DAHLBERG



CHEESE MAKING OPERATIONS AND TESTS Every step counts in cheese making

- - 2-4 Manufacture of casein and soft cheese from skim milk and buttermilk.

J. L. SAMMIS......Room 102, Dairy Bldg. 6:30 Banquet.

#### Wednesday, February 7

8-10 Milk Testing at the Cheese Factory Cream Testing at the Creamery.

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10-12	Buttermaking in Creamery from Pasteurized Cream. A. C. DAHLBERG
	Cheese Making in Cheese Factory from Pasteurized MilkJ. L. SAMMIS
	Ice Cream Making in Factory from Pasteurized Cream
•	Butter and Cheese Scoring of entries received for the month.
	G. H. BENKENDORF
	Cheese Making and Ice Cream Making continued from morning session.
	Testing Cheese samples for moisture
	J. L. SAMMIS. Room 102
7:30	Exercises in Stock Pavillion.

## Thursday, February 8

8-10	Care and Use of Farm Separators		
	G. H. BENKENDORF		
10:00	10:00 The Breeding of Dairy Cattle		
	C. H. ECKLES, Columbia, MoAuditorium		
11:00	Increasing Production through Cow Testing Associations.		
	N. A. NEGLEY. Auditorium		
2-4	2-4 Buttermaking in Creamery		
	Regulating Moisture Content of Butter.		
	Cheese making in Cheese FactoryJ. L. SAMMIS		
	The Use and Tests of Pepsin.		
	Ice Cream making in Factory.		
1	D. F. MATTSON		
	The use of the Emulser.		
7:30	Address.		
	M. D. MUNN, President National Dairy		
	Council		

### Friday, February 9

8:00	Calculating Creamery Dividends and Cost of Manufac-	
	turing Butter.	
	G. H. BENKENDORF	
9:00	:00 Methods of payment for Cheese Factory milk.	

J. L. SAMMIS. Dairy Bldg. Annex

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- 10:00 Disposal of Creamery and Cheese Factory Drainage by the septic tank and other methods.
- - - Cheesemaking in Cheese Factory.....J. L. SAMMIS. Branding Cheese and soft cheese making.
    - Ice Cream Making in Factory......D. F. MATTSON Increasing solids in ice cream mix.

8:00 Illustrated Address.

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MRS. ADDA F. HOWIE, Elm Grove, Wis.

Presentation of Medals and Diplomas to Wisconsin Farmers.

