## DEPARTMENT OF LIVESTOCK PRODUCTS TECHNOLOGY M J F COLLEGE OF VETERINARY & ANIMAL SCIENCE CHOMU, JAIPUR

## Course Outline for Theory (Session: 2021-22) Tentative Lecture Schedule 3<sup>rd</sup> Year (MSVE-2016)

**Course Title: Livestock Products Technology** 

**Credit Hrs. :- 2+1=3** 

**Duration of Lecture Class: 02-09-2021 to 30-06-22** 

Sr. No.	Date	Topic to be Covered	Hrs.
		UNIT 1 :- MILK AND MILK PRODUCTS TECHNOLOGY	
01.	02-09-21	Retrospect and Prospects of milk industry in India	1
02.	04-09-21	Composition and nutritive value of milk	1
03.	09-09-21	Factors affecting composition of milk	1
04.	11-09-21	Physico-chemical properties of milk.	1
05.	18-09-21	Microbiological deterioration of milk and milk products	1
06.	23-09-21	Collection, chilling and standardization of milk	1
07.	25-09-21	Pasteurization and UHT treatment of milk	1
08.	30-09-21	Homogenization and bactofugation of milk	1
09.	09-10-21	Dried, dehydrated and fermented milk	1
10.	14-10-21	Preparation of cream	1
11.	16-10-21	Cheese- definition, classification, properties and mozzarella	1
		cheese	
12.	21-10-21	Preparation of paneer or channa, khoa	1
13.	23-10-21	Preparation of ice-cream	1
14.	28-10-21	Preparation of ghee	1
15.	30-10-21	Common defects of milk products and their remedial measures,	1
16.	11-11-21	Packaging of milk and milk products	1
17.	13-11-21	Good manufacturing practices and implementation of HACCP in milk plant	1
18.	18-11-21	Organic milk products	1
19.	20-11-21	Preparation of dairy byproducts	1
20.	25-11-21	Food safety standards for milk and milk products	1
21.	27-11-21	Cleaning and sanitation in milk plant	1
22.	02-12-21	Dairy effluent management	1

		First internal assessment Exam	
		UNIT-II :- Wool Science	
23.	04-12-21	Introduction to wool, fur and pelt specialty fibers with respect to processing industry	1
24.	09-12-21	Glossary of terms of wool processing	1
25.	11-12-21	Basic structure and development of wool follicle	1
26.	16-12-21	Post shearing operations of wool	1
27.	18-12-21	Classification and grading of wool	1
28.	23-12-21	Physical and chemical properties of wool	1
29	30-12-21	Impurity of wool and factors influencing the quality of wool	1
30	06-01-22	Brief outline of processing of wool	1
	Uni	it -III :-(Abattoir Practices and Byproducts Technology	
31.	08-01-22	Layout and management of rural and urban abattoirs	1
32.	15-01-22	Layout and management of modern abattoirs	1
33.	20-01-22	HACCP concepts in abattoir management	1
34.	22-01-22	FSSA standards on organization and layout of abattoirs	1
35.	27-01-22	Animal welfare and pre-slaughter care	1
36.	29-01-22	handling and transport of meat animals including poultry	1
37.	03-02-22	Procedures of Ante-mortem examination of meat animals	1
38.	05-02-22	Procedures of P.M examination of meat animals	1
39.	09-02-22	Slaughtering of meat animals and birds	1
40.	12-02-22	Dressing of meat animals and birds	1
41.	23-02-22	Layout and management of rural and urban abattoirs	1
42.	10-03-22	Layout and management of modern abattoirs	1
43.	12-03-22	Emergency and casualty slaughter	1
44.	16-03-22	Emergency and casualty slaughter	1
		Second internal assessment Exam	
45.	19-03-22	Evaluation, grading and fabrication of dressed carcasses including poultry	1
46.	23-03-22	Abattoir byproducts; rendering, meat, bone, glue, gelatin	1
47.	26-03-22	Abattoir byproducts; rendering, meat, bone, glue, gelatin	1
48.	30-03-22	Abattoir byproducts; rendering, meat, bone, glue, gelatin	1
49.	07-04-22	By-products of pharmaceutical value	1
50.	09-04-22	Skin and hides; methods of flaying, defects, preservation and tanning	1
51.	16-04-22	Skin and hides; methods of flaying, defects, preservation and tanning	1
52.	21-04-22	Treatment of condemned meat and carcasses	1
53.	23-04-22	Management of effluent emanating from abattoir	1

	Sports and cultural week				
Unit -IV :- ( Meat Science)					
54.	28-04-22	Prospect of meat industry in India	1		
55.	30-04-22	Structure and composition of muscle (including poultry muscle)	1		
56.	05-05-22	Conversion of muscle to meat	1		
57.	07-05-22	Fraudulent substitution of meat	1		
58.	12-05-22	Preservation of meat and poultry; drying, salting, curing	1		
59.	14-05-22	Preservation of meat and poultry: smoking, chilling, freezing	1		
60.	19-05-22	Preservation of meat and poultry: canning, irradiation and chemicals	1		
61.	21-05-22	Nutritive value and Ageing of meat.	1		
62.	26-05-22	Modern processing technologies of meat and meat products	1		
63.	28-05-22	Formulation and development of tandoori chicken, soup, pickles	1		
64.	02-06-22	Formulation and development of meat: meat balls or patties	1		
65.	04-06-22	Formulation and development of meat; kabab, sausages	1		
	Third internal assessment Exam				
66.	09-06-22	Laws governing national or international trade in meat and meat products	1		
67.	11-06-22	Organic and genetically modified meat and poultry products	1		
68.	16-06-22	Physico-chemical and microbiological quality of meat products	1		
69.	18-06-22	Basics of sensory evaluation of meat products	1		
70.	23-06-22	Nutritive value, preservation and packaging of egg and egg products	1		
71.	25-06-22	Previous year question discussion	1		
72.	30-06-22	Previous year question discussion	1		

(Signature) Head of Department

## Tentative Lecture Schedule 3<sup>rd</sup> Year (MSVE-2016)

**Course Title: Livestock Products Technology** 

**Credit Hrs. :- 2+1=3** 

**Duration of Lecture Class: 06-09-2021 to 23-05-2022** 

Name of Teachers: Prof. R.N Kachwaha (Head of Department)

Prof. Alpaf Husain Dr. Asman Singh Gurjar Dr. Manoj Bhunkar

S.N.	Days	Topic to be Covered	Hrs.				
		MILK AND MILK PRODUCTS TECHNOLOGY					
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01.	06-09-21	Sampling and Determination of fat percentage by Gerber's method	2				
02.	13-09-21	Determination of specific gravity and total solids and solids - not-fat content of milk sample	2				
03.	20-09-21	Organoleptic test, Temperature measurement and heat stability of milk by clot on boiling test	2				
04.	27-09-21	Determination of acidity of milk	2				
05.	04-10-21	Sediment test, Alcohol test and Alizarin alcohol test	2				
06.	11-10-21	Methylene blue reduction test and Ten minute resazurin reduction test	2				
07.	18-10-21	To determine the presence of various adulterants in the milk	2				
08.	25-10-21	Manufacturing of butter and ghee from makkhan Detection of vegetable/ hydrogenated oil added to desi ghee	2				
09.	01-11-21	Manufacturing of ice cream and of milk beverages	2				
10.	08-11-21	Manufacturing of paneer/channa and khoa from the given sample of milk	2				
11.	15-11-21	Phosphatase test for efficiency of pasteurization	2				
12.	22-12-21	Bacteriological examination of milk	2				
13.	29-12-21	Visit to modem milk processing and milk manufacturing plants	2				
		UNIT-II:- Wool Science					
14.	06-12-21	Terminology, Parts of fleece and Sampling techniques of wool	2				
15.	13-12-21	Methods of Shearing	2				
16.	20-12-21	Estimation of staple length and number of crimps	2				

18. 03-01-22 Estimation of medullation percentage and fleece density  19. 10-01-22 Estimation of scouring yield and grease content  20. 17-01-22 Preservation and processing of sheep pelts  21. 24-01-22 Visit to wool processing and testing center  Unit -III :- (Abattoir Practices and Byproducts Technology  22. 31-01-22 Study of different methods of slaughter of food animals  23. 07-02-22 Slaughter, dressing and cut up parts: cattle/buffalo and	2 2 2 2 2 2 2 2			
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23. 07-02-22 Slaughter, dressing and cut up parts: cattle/buffalo and				
	2			
sheep/goat				
24. 14-02-22 Slaughtering, dressing and cut up parts: pig and poultry	2			
poultry	2			
26. 28-02-22 Dressing percent and meat bone ratio of meat animal including poultry	2			
27. 07-03-22 Preparation of different abattoir byproducts and Glandular byproducts	2			
28. 14-03-22 Tanning of skins and hides	2			
29. 21-03-22 Visit to local slaughter house	2			
Unit -IV :- ( Meat Science )				
30. 28-03-22 Packaging of meat and meat products	2			
31. 04-04-22 Packaging of eggs	2			
32. 11-04-22 Deteriorative changes in meat and meat products	2			
33. 18-04-22 Estimation of PH and (TBA) value of meat	2			
34. 25-04-22 Estimation of Tyrosine value and (ERV) value of meat	2			
35. 02-05-22 Preparation of ready-to-eat meat and poultry products	2			
36. 23-05-22 Preservation and Evaluation of external and internal quality of egg	2			

(Signature) Head of Department