

Department of Dairy science and Technology
R.K. (P.G.) College Shamli-247776
Course outcome

Title – Introductory Animal Husbandry – AG-107

3(2+1)

At the end of semester the students will

1. Understand general knowledge about the importance of livestock in agriculture and economy, dairying under specialized and mixed farming and livestock and milk producers statistics
2. Able to apply under dairy cattle and buffalo management –concept of breeding method and system. Care and management of pregnant and milch cow, raising of calves, management related to heifers and bulls. Milking methods principles ,maintenance of different livestock records .Feeds and feeding and conservation of fodder and housing for dairy animals
3. Ability to understand under pig, sheep and goat management- important breeds, breeding, feeding and raising practices.
4. Gain basic knowledge of common animal diseases of cattle, buffalo, goat, sheep and swine.

Title – Milk and milk processing – D-592

3(2+1)

At the end of semester the students will

1. Understand about the milk and its secretion and colostrum.
2. Get acquainted about the micro-organism found in milk and their functions.
3. Awareness of agencies engaged in handling and transportation of milk along with determine the pricing of milk.
4. Learning about various processing of milk like filtration, clarification, bactofugation, homogenization, cooling and chilling etc.
5. Gain knowledge about different heating process of milk like pasteurization, Ultra High Temperature treatment, sterilization etc.
6. Acquiring basic concept of membrane filtration and reverse osmosis process.
7. Idea about common adulterants and preservatives used in milk and their detection.

Title – Dairy products technology – D-692

3(2+1)

At the end of semester the students will

1. Learn about the definition, composition and how to prepare cream, butter, ghee, dahi, chhena, paneer, khoa, condensed milk, milk powder, ice-cream, cheddar and cottage cheese.
2. Acquire knowledge about the common adulterants used in ghee and khoa and their detection through different chemicals tests.
3. Learn about the equipments and utensils, their washing, cleaning and sanitization.
4. Get basic principles and process of refrigeration a cold storage of milk and its products and their utility in dairy industry.
5. Attain knowledge about the nutritive value of milk and milk products in respect of human.

Title – Dairy chemistry and Animal Nutrition – D-795

3(2+1)

At the end of semester the students will

1. Acquire integrate knowledge about milk secretion theories, detailed chemical composition, various depending on the species like cow, buffalo, goat, sheep, camel and human.
2. Learn about colostrum and its chemical composition and difference between milk and colostrum.
3. Ability to understand various physio-chemical properties of milk and their importance in milk adulteration.
4. Know the factors affecting the quantity and quality of milk produced and clean milk production.
5. Explore the bio-chemical changes during storage of milk.
6. Acquire detail knowledge about the chemistry of milk constituents, viz. Lactose, protein, fat, enzymes and vitamins.
7. Get acquainted about the chemical composition of animal body and feeds.
8. Learning about classification of feeding stuffs.

9. Ability to cope up with function of food constituent, their digestion and absorption in ruminants.
10. Have a through understanding about the metabolism of fat, carbohydrate and protein in ruminants.
11. Learn about the role of minerals, hormones, vitamins and antibiotics in animals feeding with special reference to deficiency diseases.

Title – Rural Agriculture Work Experience (RAWE) and Agro- Industrial Attachment (AIA) with Animal Husbandry and Dairying related work – D-891(e) Dairy

At the end of semester the students will

1. Get practical experience of mixed farming system.
2. Attain practical knowledge about the agro based products especially dairy products and learn about the functioning in industry.
3. Acquire basis concept of food processing.
4. Get opportunity to have a close observation of the farmer working in the field