

Course Syllabi

1. INDU-00039 INDUSTRIAL PROCESSING OF MILK AND CARNIC

2. Instructors:

- Servio Rodrigo Astudillo Segovia
- Patricia Liliana Ramirez Jimbo

3. Bibliography

- Análisis funcional y microbiológico de derivados lácteos y cárnicos , Rodríguez Andrade, Ruth;Góngora Marín, Paula Alejandra;Amado Agudelo, Natalia;Santamaría Gaona, Juan Pablo, 2020
- Química de los Alimentos, Salvador Badui Dergal, 2013
- Fundamentos de ciencia de la carne, Forrest; Aberle;Hedrick;Judge;Merkel, 1999
- Chacineria Práctica, R.Sainz, 1974
- Lean Manufacturing. Su impacto en la productividad en una empresa de lácteos ; Lean Manufacturing. Its impact on productivity in a dairy company ; Lean Manufacturing. Seu impacto na produtividade de uma empresa leiteira., Gil Vega, Astrid Elisa Karolane; Universidad César Vallejo - Perú; Hinojosa Duran, Soledad Jocelyn; Aranda Gonzalez, Jorge Roger, 2023

4. Specific Course Information

- a. The subject of industrial processing of meat and dairy is theoretical in nature - practical, designed for the student to manage with property the fundamentals of science and technology, and also seeks to relate to the knowledge of the categorization and transformation of raw materials within the agro-industry. - Learning achievements of the discharge profile. 1. Apply knowledge and skills in mathematics and chemistry as basic tools for solving problems in the 2. Communicate effectively in written oral form using the appropriate technical language, whether working individually or in interdisciplinary and/or multi-ethnic teams. 3. Use specialized software packages effectively for the realization of problems of chemical operations and processes and plant design. 4. Perform chemical analyses several operating laboratory equipment, using updated analytical techniques, already applying good practice 6. To control experiments and processes in the field of chemical engineering, considering transport phenomena, unitary operations, chemical processes and operational research to obtain relevant information and meet the objectives previously defined. 8. To recognize the knowledge of ancestral values, enabling their incorporation into professional practice to develop new products, innovate and optimize product practices 11. To evaluate and develop industrial projects with technical and economic criteria in order to estimate their feasibility. 14 To act with professional ethics, considering the social and economic impact of their professional practice, in the regulatory areas related to quality, health and safety and the environment.

b. Prerequisites:

- INDU-00024 Biochemistry food
- SVCS-00036 Community service
- INDU-00036 Op III ionic exchange
- INDU-00037 Ope III wetting-drying

5. Learning Objectives of the Course

- a. To provide students with theoretical - practical knowledge that allows them to work in the field of the food industry, whether it be in charge of laboratory, production area, research and development, facing real situations and promoting ethical work within the parameters and legal regulations. - To

understand the foundation of the main physicochemical indicators of the quality of raw materials - to apply the appropriate techniques so that the product to be manufactured, and REALIZING THE CONTROL OF QUALITY REQUIRED DURING ALL THE PROCESS, TO GUARANTEE THE PRESENTATION, NUTRITIONAL QUALITY AND MICROBIAN INEQUITY OF THE ALIMENT, APPLYING THE LEGISLATION INVOLVING THE FOOD INDUSTRY - DEVELOPING NEW PRODUCTS IN WHICH THE KNOWLEDGE ACQUIRED IN AN INNOVATIVE PRODUCT IS INTEGRATED.

b. Learning Outcomes

1. Rda2 - design processing processes in the food industry.
2. Rda1 - ability to understand and apply the basic processes of product processing.
3. Rda3 - select equipment and machinery suitable for processing processes.
4. Rda4 to adapt the technologies for the production of processed products.

6. Course Topics

1. Meat technology and its categorization 1.1. machinery and metrology equipment
2. Introduction: lactic industry 2.1 good manufacturing practices in the lactic industry
3. Additives, species and conditions.
4. Lack products packs
5. Natural and artificial shipping, mesh and empty packagings with modified atmosphere
6. Cheeges: fresh - mother - requeson - mozzarella.
7. 7. scheduled past products
8. 8. massaged products
9. 9. summediate products.