

Tárgytematika / Course Description

Diary machinery, operations and technologies

N_DMA49

Tárgyfelelős neve /

Teacher's name: dr. Varga László

Félév / Semester: 2022/23/1

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 0/0/0

Tárgy féléves óraszám /

Teaching hours(sem.): 30/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

The aim of the course is to introduce technologies for the production of dairy products. The object is to discuss the production technology tasks of the machinery and equipment that are essential in the dairy industry, the technological aspects of the work, and the alternatives of modern construction solutions. Through the presentation of the operations and machines the students will gain an understanding of the complex technology systems.

TANTÁRGY TARTALMA / DESCRIPTION

1. Raw materials and auxiliary materials of the dairy industry.
2. Composition and qualification of raw milk.
3. General operations of milk processing 1 (acceptance, storage, cleaning, smoothing).
4. General operations of milk processing 2.(homogenization, recombination, reemulsification).
5. Production of heat-treated consumer milk and milk products.
6. Manufacture of sour milk and cream products.
7. Manufacture of sweet (non-acidified) cream products.
8. Operations, technologies and machines for the production of the different kinds of butter.

9. Production of acidic curdled cheese and cheese products.
10. Production of rennet curdled cheese.
11. Production of processed cheese.
12. Processes, technologies and machines for the production of powdered milk products.

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

Meeting the conditions set by the supervisor.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Szakály S. (2001): Dairy economics. Competence Publisher.

Biacs P., Szabó G., Szendrő P., Véha A. (2010): Food Technology for Engineers. University of Szeged

Hoffer E. (2006): Dairy machinery and equipment. FVM Training and Consultancy Institute

Ibarz A., Barbosa Cánovas G.V. (2003): Unit operation in food engineering. CRC Press.

Saracovas G.D., Maroulis Z. (2011): Food process engineering operations. CRC Press