

Tárgytematika / Course Description Applied Microbiology

N_DMA47

Tárgyfelelős neve /

Teacher's name: dr. Szigeti Jenő

Félév / Semester: 2024/25/1

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 primary purpose of this course is to help students develop an appreciation and understanding of the complex microbiological factors influencing feed and food quality during production and processing. "Applied microbiology" is closely connected to "Food microbiology" and "Food biotechnology".

TANTÁRGY TARTALMA / DESCRIPTION

Spoilage and pathogenic microorganisms in the microclimate, feedstuffs, and waters.
Feed storage, preservation, and by-product processing; microbiology of drinking water.
Fungal contamination of feedstuffs.
Fungal and bacterial spoilage of feedstuffs.
Microbiological aspects of storage of cereals and processed cereal products.
Microbial antagonism in animal keeping and husbandry.
Microbiological aspects of meat and egg processing.
Microbiological aspects of milk production and processing.
Protection against microbiological hazards in the food production environment.
Microbiological aspects of refrigeration and frozen storage of food raw materials and processed products.
Microbiological aspects of storing and processing cereals.
Microbiology of the fermentation industries.

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

Meeting the conditions set by the supervisor.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Forsythe, S. J. (2010): The microbiology of safe foods (2nd ed.). Wiley-Blackwell, Oxford, UK.

Glazer, A. N., Nikaido, H. (2007): Microbial biotechnology: fundamentals of applied microbiology (2nd ed.). Cambridge University Press, Cambridge, UK.

Original research papers and up-to-date reviews published in major scientific journals such as

AJÁNLOTT IRODALOM / RECOMMENDED MATERIAL