FOOD MICROBIOLOGY (6th year)

No. of credits 3

Subject structure (weekly assigned hours)

Semester	Lecture	Seminar	Practical session	Project
XI	2	-	2	-
XII	-	-	-	-

Subject status
Compulsory

Person in charge
Mihai Mareș DVM PhD – Professor

Subject objectives (lectures and applications)

- knowledge of factors that influence the microorganisms multiplication in food
- knowledge of epidemiology, clinical aspects, diagnostic methods in foodborne diseases
- knowledge of control methods of various micorrganisms in food

Subject content (sylabus)

Lectures	Hrs.
Introduction; The importance of food microbiology for public health	2
Factors affecting the microbial multiplication in food – beneficial and detrimental effects	2
Foodborne diseases: classification, epidemiological astects, public health issues	2
Foodborne diseases due to Escherichia, Staphylococcus, Salmonella, Listeria, Bacillus, Clostridium, Campylobacter, and Vibrio	16
Fungi and mycotoxins in food	2
Control methods of microorganisms contaminating food	4

Practical Sessions	Hrs.
Collecting, transport and primary processing of samples	2
Evaluation of the total microbial burden in various food	4
Evaluation of hygiene state in food plants	2
Standardized methods for detection of microbial contaminants in food (coliforms,E. coli, S. aureus, enterococci, Salmonella, Listeria, Bacillus cereus, clostridii, Campylobacter, Vibrio, yeasts and molds)	20

Bibliography

1. Weekly lectures (prezentare Power Point).
2. Ray B (2005) – Fundamental Food Microbiology; 3rd ed.; CRC Press, USA.
3. Magan N, Olsen M (2004) – Mycotoxins in food – detection and control, CRC Press, USA

Final evaluation

Evaluation type	Evaluation methods	Percentage from final
Theoretical exam		50 %
Individual activity during the semester		30 %
Lecture attendance		20 %

Contact person

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