



Course catalogue

TTF-PB202 Food Microbiology

Programme	Food technology and biotechnology
Level	Bachelor's programme
Academic year	II year
Semester	Autumn Semester
ECTS credits	6 credits
Lecturers	Ass. Prof. Tatjana Blazhevskaja, PhD Ass. Prof. Marija Menkinoska, PhD
Language	Macedonian
Objective	To gain knowledge of general and industrial microbiology Evaluate the effectiveness of methods for preventing microbial contamination of food. Predict critical sites in the food industry for the formation of biofilms. Distinguish the cause of infection from the cause of intoxication
Content	Microbial contamination of water, air, food and feed. Detection and identification of microorganisms in food (classical and new methods). Abiotic factors and their influence on the growth and multiplication of microorganisms to biosynthesis of toxins. Poisoning with Microbially Contaminated Food. Microorganisms important in food production. Protecting foods from microbial degradation by physico-chemical methods, radiation, high pressure, ultrasound. Alimentary toxicity infections caused by sporogenic Gram-positive bacteria (Bacillus cereus, B. subtilis, Clostridium perfringens, Cl. Botulinum), non-degrading gram-positive bacteria (Staphylococcus aureus, Streptococcus faecalis, Listeria) and gram-negative bacteria Escherichia coli, Vibrio haemolyticus, Pseudomonas aeruginosa, Salmonella sp., Campylobacter jejuni). Types of molds that produce mycotoxins in food and feed.
Learning materials	Excerpts from the primary literature will be used during classes and published on the website.