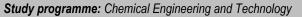


## **UNIVERSITY OF EAST SARAJEVO**

Faculty of Technology Zvornik



Cycle I Year IV



Course title HYGIENE AND SANITATION IN FOOD PRODUCTION

**Department** Department for Food Technology – Faculty of Technology Zvornik

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Course code		Course status	Semester	ECTS		
04-2-112-7		Elective	VII	4		
Teacher	Vesna Gojković	ojković Cvjetković, PhD, assistant professor				

Teaching assistant Vesna Gojković Cvjetković, PhD, assistant professor

Number of hours/ teaching workload (per week)			Individual student workload (in hours per semester)			Student workload coefficient S <sub>o</sub>	
Lectures	Auditory exercises	Laboratory exercises	Lecture	Audit exerc	. *	Laboratory exercises	So
2	0	2	30	0		30	1.00
	2*15+0*15+2*15	5=60 hours		(2*1	15*1.00+	0*15*1.00+2*15*	1.00)=60 hours

Total course workload 60 + 60=120 hours per semester

## Learning outcomes

After finishing the course, students will be able to:

- 1. understand the importance of hygiene in food safety,
- 2. demonstrate and utilize the knowledge of the ways of contamination with the most important pathogens and the ways to control the most important pathogens in the food production chain,
- 3. demonstrate and utilize the knowledge of detergents and disinfectants and the ability to conduct testing of their activity,4. implement legal requirements for hygiene and control of hazard intake, growth of
- microorganisms and cross-contamination in the food industry,
- 5. apply good manufacturing practice in the maintenance of process plants, staff hygiene, and hygienic food handling.

## **Prerequisites**

Teaching methods Lectures, auditory and laboratory exercises, mid-term tests (colloquia).

- 1. Basics of hygiene and sanitation in food production.
  - 2. Sources of contamination of food and process plants.
  - 3. Microorganisms. Pathogen control in the food industry.
  - 4. Employee hygiene.
  - 5. Hygienic food handling. Food poisoning, types and causes.
  - 6. Detergents and modes of action, sanitizers and modes of action.
  - 7. Chemical contamination of food.
  - 8. Properties of surfaces that come into contact with food, biofilms and their removal.

## Syllabus outline per week

- 9. Characteristics of sanitation equipment.
- 10. The importance of water for sanitation, the importance of the layout of the equipment in operation, the importance of proper air flow.
- 11. Pest control. Waste management.
- 12. Basic legal regulations.
- 13. Obligations of the food industry according to the requirements for hygiene in processes.
- 14. Good manufacturing practice (GMP), good hygiene practice (GHP)
- 15. Prerequisite programs in the design and construction of facilities (external and internal requirements for the construction of facilities), cross-contamination.

Mid-term tests are taken after the 8th week and the 15th week. Semester verification is required after the 15th week.

Obligatory reading					
Author	Title, publisher	Year	Pages		

Šubarić, D., Babić, J	I., Ačkar, Đ.	Hygiene and sanitation, PTF, Osijek	2012		1-177		
Fons-Sole, E., Grujić, R., Vučić, G., Škipina, B., Mirjanić, D.		Contemporary technologies and food safety	2004		1-67		
Šubarić, D. , Babić, J., Ačkar, Đ.		Hygiene and Sanitation, PTF, Osijek	2012		1-177		
Sanchias, AV, Allaert, VC, As- Almenar, I. VI., Sala, MN, Torres, GM		Practicum in Food Microbiology, University of Lleida, Catalonia-Spain, University of Banja Luci, Univerzitet u Tuzli	2001		1-113		
		Additional reading					
Author	· · · · · · · · · · · · · · · · · · ·				Pages		
Marriott, NG, Gravani, RB		Principles of Food Sanitation, Fifth Edition, Springer Science, Business Media, Inc	<b>Year</b> 2006		1- 425		
Marriott, NG		Essentials of food sanitation., International Thomson Publishing.	1997		1-359		
Roberts, TA		Microorganisms in foods, second edition, Kluwer Academic / Plenum Publishers New York	2005		1-723		
		Type of student evaluation		Grade points	Percentage		
	Pre-exam obligations Attendance 6 6 %						
Obligations,		Attendance			6 %		
assessment		Mid-term test I			20 %		
methods and	ethods and Mid-term test II			20 24	20 %		
grading system		Laboratory exercises			24 %		
	Final examination						
	Final examination (oral)				30 %		
	Total	ai ovanimation	30 100	100 %			
Web page	www.tfzv.ues.rs.ba						
Date	2023						
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