

<b>Study Programme:</b> Food Engineering		
<b>Course Unit Title:</b> Modern Methods of Food Preservation		
<b>Course Unit Code:</b> M2TKH3		
<b>Name of Lecturer(s):</b> Full Professor Mirela Iličić, Associate Professor Katarina Kanurić		
<b>Type and Level of Studies:</b> Master Academic Degree		
<b>Course Status (compulsory/elective):</b> Elective		
<b>Semester (winter/summer):</b> Summer		
<b>Language of instruction:</b> English		
<b>Mode of course unit delivery (face-to-face/distance learning):</b> Face-to face		
<b>Number of ECTS Allocated:</b> 7		
<b>Prerequisites:</b> None		
<b>Course Aims:</b> The objective of this course is the introduction of students with modern scientific and practical achievements in the field of modern trends in food preservation technology.		
<b>Learning Outcomes:</b> Students of master studies are trained to introduce innovations, advanced operations and processes in the field of food preservation technology.		
<b>Syllabus:</b> Development in conventional heat treatment Combining heat treatment , control of water activity and pressure to preserve food.. Heat processing by direct and radiated energy. Innovation in concentration of food components. Heat processing using hot air. Novel processes that may have application for minimal processing of foods– ultrasound, electric field, high hydrostatic pressur. The use of natural antimicrobials . Fermentation and enzymes technology. Combining modern food preservation processes with other preservation techniques and impact on quality of product. Monitoring the effectiveness of food preservation.  <i>Practice</i> Calculating tasks and problems, monitoring parameters of selected processes of food preservation, search, processing and analysis of the results of scientific and professional literature in the field of modern food preservation processes.		
<b>Required Reading:</b> 1. Zeuthen, P., Bogh-Sorensen, L., eds.: Food Preservation Techniques, Woodhead Publishing Limited, 2003. 2. Fellows, P.J.: Food Processing Technology, Principles and Practice, Second edition, Woodhead Publishing Limited, 2003. 3. Ojha, K.S., Tiwari, B.K.: Novel Food Fermentation Technologies,eds. Springer Int. Publ., 2016. 4. Toledo, R.T. Fundamentals of Food Process Engineering, Van Nostrand Reinhold, New York, Second Edition, 1991. 5. Holdsworth, D., Simpson, R. Thermal Processing of Packaged Foods, Springer, 2007.		
<b>Weekly Contact Hours:</b>	<b>Lectures: 3</b>	<b>Practical work: 3</b>
<b>Teaching Methods:</b> Lectures and students group work.		

<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Active class participation	10	written exam	
Practical work		oral exam	50
Preliminary exam(s)	20	.....	
Seminar(s)	20		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			