

MODUL	FOOD 3S.2	COURSE TITLE	Fermentation Technologies		ECTS	6
FACULTY COORDINATOR		prof.dr hab.. Z.Krejpcio	DEPARTMENT	Food Science and Nutrition		
TEACHER			prof.dr hab. J.Nowak, prof. dr hab.Z.Czarnecki, dr m.Lasik, Dr m.Kuligowski, dr K.Goderska			
VOLUME (H)	45		PERSONAL WORK (H)	100		
LECTURE (H)	LAB (H)	PLACEMENT (H)	PROJECT (H)	OTHER MODALITIES (H)		
15	30					
EVALUATION			TEACHING METHODS			
EVALUATION MODALITIES			Multimedial lectures adressed to all participants,			
ORAL INDIVIDUAL REPORT			Participation in demonstrations and labs			
WRITEN INDYVIDUAL REPORT		30%	Participation in trips to food technology plants			
FINAL ORAL EXAM			Reports form industry trips			
FINAL WRITTEN EXAM		70%				
COMMENTS OF EVALUATION		Power point presentaion on fermentation technology of the chosen product - preferably from				
SEMESTER (WINTER/SUMMER)			LANGUAGE			
WS			ENGLISH			
<b>OBJECTIVES</b>						
The aim of the course is to get information on fermentation (natural) methods of food fermentation						
Acquire knowledge about major food contaminants and poisons and poisoning, toxicants formed during food processing and storage						
Learn about functional and nutritional properties get by fermentation						
Students have possibilities to visit breweries, distillery plants and malt production plants to evaluate the theory versus pratic technologies						
<b>CONTENTS</b>						
Basic on microorganisms in food fermentation and biomass production						
Technology of fermented ethanol products, LAB in souring od vegetables and fungi in fermented foods						
Yeast production for biomass - bakery yeast and yaest preparates						
Probiotics and prebiotics - microorganisms mechanism of action and technology						
Less known indigenous fermented foods						
Future perspectives of fermented foods						
PRE-REQUISSES		basis of biochemistry and microbiology				