

Study programme: Food Technology			
Type and level of study: Bachelor's degree (240 ECTS) – First cycle			
Course title: Fruit and vegetables technology			
Lecturer: Associate Prof. Nemanja Miletić, PhD (Assistant: Jelena Pantović, MSc)			
Language of instruction: English			
ECTS credits: 6			
Prerequisite:			
Semester: <i>summer</i>			
Course objective Acquiring knowledge and skills regarding the fruits and vegetables processing. Enabling students to follow the entire industrial processes, which include quality control of raw materials, semi-processed products and final products.			
Learning outcomes Gaining knowledge which enables active following of different technological steps during fruits and vegetables processing. Knowing the critical points, students will be enabled to preserve and save all natural constituents (pigments, vitamins, aromas, antioxidants, etc.) of fruits and vegetables during processing, and to produce final products with minimal loss of these ingredients.			
Course contents Mechanical properties of fruits and vegetables. Chemical composition of fruits and vegetables. Technological maturity. Additives. Sweetening agents. Gelling agents. Acidification agents. Curing agents. Preservatives. Antioxidants. Pigments. Aromas. Food products preservation: sterilization, pasteurization, flash pasteurization, HTST, uperization. Produce drying. Freeze drying. Produce concentrating. Fruits and vegetables browning. Produce freezing. Fruits and vegetables semi-processed products. Jams and marmalades. Candied fruits. Juices. Sterilized vegetables. Biologically preserved vegetables. Pectin production.			
Recommended reading Sinha, N.K., Sidhu, J.S., Barta, J., Wu, J.S.B., Cano, M.P. (2012): Handbook of Fruits and Vegetables Processing.			
Hours of active teaching			Other classes
Lectures:	Practicals: 2x15=30	Other forms of teaching Tutorials 3x15=45	Individual work:
Teaching methods Lectures are held in classrooms and laboratories using modern devices and teaching aids. Laboratory and practical sessions involve individual student work. Visits of modern commercial wineries are planned. For term paper assignments, office hours are open for questions regarding the choice of topic and selection of relevant references.			
Assessment (maximum points 100)			
Examination requirements	Points	Final examination	Points
Class participation	10	oral examination	50
Practical sessions/tests	10	written examination	30
Term paper assignments/homework		
Project			
Other			
Grading system			
Grade	ECTS	Description	
10	91-100	Excellent	
9	81-90	Exceptionally good	
8	71-80	Very good	
7	61-70	Good	
6	51-60	Passing	
5	≤50	Failing	