



## Course catalogue

# TTF-NUT310 Food Preparation Processes

Programme	Nutrition
Level	Bachelor's programme
Academic year	III year
Semester	Spring Semester
ECTS credits	5 credits
Lecturers	Ass. Prof. Daniela Nikolovska Nedelkoska, PhD
Language	Macedonian
Objective	Understanding the basic principles of food preparation and preservation processes, as well as application of these principles to processes in food production in order to ensure delivery of safe food products with optimal nutritional quality.
Content	Factors responsible for quality deterioration of food. Nutritional and physical (rheological and thermal properties) properties of food. Basic Food Preparation Processes. Effects of processing conditions on the quality and nutritional value of food. Thermal preparation processes (blanching, cooking, roasting, baking). Principles of food preservation. Food preservation by thermal inactivation of enzymes and microorganisms: traditional (canning) processing and aseptic processing. Food preservation by heat removal (refrigeration and freezing); Controlled and modified atmosphere storage. Changes in food during freezing and frozen storage. Food drying. Biological methods of preservation. Preservation by additives. Introduction of new technologies of food preservation. Minimally processed food. Heat and mass transfer in food preparation processes. Mass and energy balances in in food preparation processes.
Learning materials	Reading from the primary literature are referenced in class and posted to the course website.