Course Unit Descriptor

Study Programme: Food engineering

Course Unit Title: Technology of starch

Course Unit Code: UHO 303

Name of Lecturer(s):dr Ljubica Dokic

Type and Level of Studies:bachelor academic degree

Course Status (compulsory/elective): compulsory

Semester (winter/summer):winter

Language of instruction: english

Mode of course unit delivery (face-to-face/distance learning): face to face

Number of ECTS Allocated: 5

Prerequisites:none

Course Aims:

Getting knowledge on different botanical resources for starch production and industrial processes for starch extraction.

Learning Outcomes:

Gaining knowledge about starch production form different plants and organization of production

Syllabus:

Theory

Structure and chemical properties of corn, wheat and potato as row material for starch production. Specific production process and unit operation s for starch extraction form different raw material. Quality parameters of products and by products and their application in food and feed production. Chemical and thermal modification of starch and its application as food and technical starches.

Practice

Extraction of starch from corn in laboratory. Analytical methods for determination of starch in different products, Viscosity of starch form different botanical origin.

Required Reading:

Starch: Chemistry and Technology, Ed. BeMiller J. Whistler R., Elsevier, 2009

Weekly Contact Hours: 5		Lectures:3		Practical work: 2
Teaching Methods: Lecture and laboratory work				
Knowledge Assessment (maximum of 100 points):				
Pre-exam obligations	points		Final exam	points
Active class participation			written exam	
Practical work	10		oral exam	30
Preliminary exam(s)	60			
Seminar(s)				
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation seminars, etc.				
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