

Subject name	Modern Aspects of Carbohydrates Chemistry and Technology	
Subject code	E.2.MACT.SC.ECTIE.T	
Department	Department of Carbohydrate Technology	
Faculty	Food Technology	
Subject supervisor/Lecturer	Marcin Lukasiewicz Ph.D.; Stanisław Kowalski Ph.D.	
General information	semester	summer
	ECTS credits	6
	Lectures total	15
	Laboratories	15
Objective and general description	<p>The main goal of the course is to show and pass the basic knowledge on carbohydrate chemistry and technology. The course will focus on modern aspects of carbohydrate science including chemistry, physical chemistry, biotechnology and its reflection to technology including eco-friendly processes. Additionally students will gain skills in analytical procedures in carbohydrate processing, basic chemical transformations of sugar as well as developing of polysaccharide structure functionality relationship.</p>	
Assessment method	Written report & test	
References	<ol style="list-style-type: none"> 1. Sinnott M. Carbohydrate Chemistry and Biochemistry: Structure and mechanism. 1. wyd. Royal Society of Chemistry; 2007. 2. BeMiller JN, Whistler RL. Starch, Third Edition: Chemistry and Technology. 3. wyd. Academic Press; 2009. 3. Bucke C. Carbohydrate Biotechnology Protocols. 1. wyd. Humana Press; 1999. 4. Cui SW. Food Carbohydrates: Chemistry, Physical Properties, and Applications. 1. wyd. CRC Press; 2005. 5. Eliasson A. Starch in Food: Structure, Function and Applications. 1. wyd. CRC Press; 2004. 6. Ito R, Matsuo Y. Handbook of Carbohydrate Polymers: Development, Properties and Applications. Nova Science Pub Inc; 2010. 7. Stick RV, Williams S. Carbohydrates: The Essential Molecules of Life, Second Edition. 2. wyd. Elsevier Science; 2008. 	