Level: PhD

Course title: Chemical transformation of monosaccharides (DSB606)

Status: elective ECTS: 15

Requirements:

Learning objectives

Introduce students to recent scientific developments in the field of monosaccharides and derivatives in terms of synthetic, medicinal and biological chemistry.

Learning outcomes

Obtaining knowledge about the chemical reactivity of carbohydrates.

Syllabus

Theoretical instruction

Reactions of hydroxyl groups of monosaccharides. Protecting groups and selective protection strategies. Formation of leaving groups. Halogenation reactions of monosaccharides. The Mitsunobu reaction. Formation of carbon-carbon bonds. Oxidations and reductions. Rearrangements and isomerizations. Glycosylation methods and stereochemical aspect of glycoside bond formation.

Practical instruction

Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	