Level: PhD

**Course title:** Chemical Transformation of Monosaccharides (DSB606)

Status: elective

**ECTS**: 15

## Requirements: None

## 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

Obtain 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:	Exercises:	Other forms of	Student research:	
5		teaching:	5	