**Level**: PhD

**Course title:** Intermolecular Interactions (DSH-607)

**Status**: Elective

**ECTS**: 15

**Requirements**: None

**Learning objectives**

Acquiring profound theoretical and practical knowledge of particular topics of intermolecular interactions, depending on the subject of a PhD thesis.

**Learning outcomes**

Students should be able to apply the acquired broad knowledge of the relevant topics of intermolecular interactions to improve their PhD thesis and overall chemical education.

**Syllabus**

***Theoretical instruction***

Intermolecular potentials. Orientation, induction and dispersion interactions between molecules. Hydrogen bonding. Theory of hydrogen bonding. Phenomena caused by hydrogen bonding. Spectroscopic manifestations of hydrogen bonding. Hydrogen bonding in biological systems.

***Practical instruction***

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