Level: PhD

Course title: Selected experimental methods for determination of bioactivity (DSB612)

Status: elective

ECTS: 15

Requirements: none

Learning objectives

The goal of this course is to provide students with advanced theoretical knowledge for estimating biological activities of pharmacologically active substances and natural products.

Learning outcomes

Students will be able to independently select, adapt, develop and implement methods for testing different biological activities and determine the potential of tested compounds.

Syllabus

Theoretical instruction:

Estimation of biological activities of pharmacologically active substances and natural products. *In vitro*, *in vivo* and *ex vivo* assays. Analysis of the principle of selection of appropriate methods, substrate, target molecules, activators / inhibitors, biological response, ways to detect biological activity and present results. Detailed analysis of the determination of anti-inflammatory, antioxidant, cytotoxic and antimicrobial activities. Selected examples of *in vitro*, *in vivo* and *ex vivo* methods for investigation of various biological activities.

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