Level: bachelor

Course title: Analytical Laboratory Quality Management (IHA-410)

Status: elective

**ECTS**: 7

# Requirements: none

# Learning objectives

To introduce students to the principles of quality management in the analytical laboratories and the legislation in the field. Obtaining up-to-date knowledge especially in the field of accreditation and certification.

#### Learning outcomes

Upon successful completion of this course, students should be able to:

- demonstrate knowledge of the elements of modern analytical laboratory quality management and apply it in practice;
- validate an analytical method; and •
- consider the quality as a basic principle and purpose in analytical laboratories. •

### Syllabus

#### Theoretical instruction

Analytical system (problem, sample, method). Quality assurance in analytical laboratories (good analytical practice, good laboratory practice, good measurement practices, standard operating procedures). Sample and sampling. Preparation of samples. Calibration of measuring instruments. The choice of methods for the determination of analyte. Evaluation of measurement uncertainty. Validation of analytical methods. Standards and standardization.

Practical instruction

Practical instruction follows the theoretical instruction.

## Weekly teaching load

Weekly teaching load				Other:
Lectures:	Exercises:	Other forms of	Student research:	
2	1	teaching: 2		