

## SUBJECT

**Subject's code:**

**Subject's name:** EXERCISES IN INSTRUMENTAL ANALYSIS

**Subject's capacity:** 4 ECP

**Kontrolli vorm:** Assessment

**Language:** English

**Teaching semester:** spring/autumn

**Subject's purpose:** To develop the knowledge and skills needed to understand the principles of instrumental analysis. The emphasis is on separation methods

**Subject matter:** Principles of the separation and detection methods of instrumental analytical chemistry: gas and liquid chromatography, mass-spectrometry, capillary electrophoresis.

**Result:** Is able to use correctly the essential chromatography, mass spectrometry and capillary electrophoresis vocabulary, is able to discuss about the keyword topics of lectures;

Knows important submodes of separation methods and capillary electrophoresis methods, can describe the principles and applications of these submodes;

Is able independently read and understand the separation science literature including recent scientific research papers, is able to make summaries based on the before mentioned literature;

Is able to present the results clearly and logically, interpret these and make proper conclusions.

**Estimation criterion:** Assessment.

**Reading list:** Kellner, R., Mermet, J. M., Otto, M., Widmer, H. M. (1998). Analytical Chemistry: the Approved text to the FECS Curriculum Analytical Chemistry. Weinheim, New York, Chichester, Brisbane, Toronto, Singapore, Wiley-VCA.

**Nomination date:**

**Prerequisite(s):** -

**Declaration rule(s):**

**Self-contained work:** Working with literature, writing a referative work.

**Ainekava koostanud struktuuriüksuse kinnitus:**

**Ainekava kooskõlastus:**

**Õppekavad, millesse kuulub:** KAPB/09, KAPB/09L, KAPB/10, KAPB/10L, KAPB/11, KAPB/11L, KAPB/12, MLFB/10, MLFB/11, MLFB/12, MLGB/08, MLGB/09, MLGB/10, MLGB/11, MLKSB/08, MLKSB/09, MLKSB/10, MLKSB/11, MLKSB/12