

STUDY PROGRAMME	CHEMICAL ANALYSIS, 653F18001
SUBJECT TITLE	Chromatographic Analysis
NUMBER OF CREDITS	6
DURATION OF SUBJECT	Total: 160 hours (88 contact hours, 72 self-study hours)
TEACHING PERIOD	Spring Semester
SUBJECT CONTENT	<p>Subject objective The aim of the subject is to deepen a chemistry specialist's skills in the diversity of chemical analysis methods on the basis of the knowledge in chromatographic analysis, and develop practical skills.</p> <p>Learning outcomes Be able to: apply the knowledge in solving chromatographic analysis issues; describe the specifics of the chromatographic analysis methods; choose appropriate chromatographic analysis research methods taking into consideration the structure, nature and properties of inorganic and organic compounds; carry out tests competently using the methods of chromatographic analysis in accordance with the theoretical basics of qualitative and quantitative analysis; to use modern virtual tools to collect and process the chromatographic analysis data; to explain and comment on the chromatographic analysis measurement data submitted in the reports</p> <p>Content (topics)</p> <ol style="list-style-type: none"> 1. Fundamentals of chromatographic analysis 2. Liquid adsorptive chromatography. Effective chromatography 3. Distributive chromatography. Thin layer chromatography 4. Ion-exchange chromatography 5. Affinity chromatography 6. Gel permeation chromatography 7. Electrophoresis chromatography 8. Gas chromatography apparatus and performance of the analysis 9. Column gas chromatographic analysis 10. Quantitative gas chromatography analysis 11. Examples of chromatographic analysis application
ASSESSMENT	Cumulative assessment (intermediate settlements, laboratory work, self-study, examination)
SUBJECT COORDINATOR	PhD Inga Stankevičienė Vilniaus kolegija/University of Applied Sciences, Faculty of Agrotechnologies, Chemistry Department 2A Beržų str., Buivydiškės, Vilnius district, LT-14160, Lithuania Tel. +370 5 2 19 16 59 E-mail: chemija@atf.viko.lt