

Instrumental Drug Analysis Practice
2024/2025 Academic year, 1st semester
Friday 13:30-17:15

DATE	THEME	SEMINAR, REPORTS
Week 1 06. 09. .	UV SPECTROSCOPY I. OPTICAL ROTATION UV spectroscopy: qualification, validation, identification, linearity Determination of optical rotation	
Week 2 13.09	UV SPECTROSCOPY II. AMPEROMETRY UV spectroscopy: assays, difference spectroscopy Amperometry: nitritometry, determination of water content by the Karl Fischer method	
Weeks 3-4 20. 09. 27. 09.	IR, RAMAN SPECTROSCOPY POTENTIOMETRY IR, Raman spectroscopy: identification Potenciometry: pKa determination	
Weeks 5-6 04.10. 11. 10.	HPLC I. ORD, CD SPECTROSCOPY (Seminar) HPLC: introduction, chromatographic parameters	PROJECT REPORT on week 5 (weeks 1-4)
Weeks 7-8 18.10. 25.10.	HPLC II. CAPILLARY ELECTROPHORESIS HPLC: identification, assay	
Weeks 9-10	HPLC III.	PROJECT REPORT on week 10 (weeks 5-8)

01. 11. Holiday 08. 11.	MASS SPECTROMETRY (Seminar) HPLC: purity tests	
Weeks 11-12 15. 11. 22. 11.	NMR SPECTROSCOPY (Seminar)	
Weeks 13-14 29.11 06.12	Plate-based methods, permeability measurements	PROJECT REPORT on week 13 (weeks 9-12) RETAKES on week 14