

Instrumental Drug Analysis Practice
2025/2026 Academic year, 1st semester
Friday 13:30-17:15

DATE	THEME	SEMINAR, REPORTS
Week 1 12. 09.	UV SPECTROSCOPY I. OPTICAL ROTATION UV spectroscopy: qualification, validation, identification, linearity Determination of optical rotation	
Week 2 19.09	UV SPECTROSCOPY II. AMPEROMETRY UV spectroscopy: assays, difference spectroscopy Amperometry: nitritometriy, determination of water content by the Karl Fischer method	
Weeks 3-4 26. 09. 03. 10.	IR, RAMAN SPECTROSCOPY POTENTIOMETRY IR, Raman spectroscopy: identification Potenciometry: pKa determination	
Weeks 5-6 10.10. 17. 10.	HPLC I. ORD, CD SPECTROSCOPY (Seminar) HPLC: introduction, chromatographic parameters	PROJECT REPORT on week 5 (weeks 1-4)
Weeks 7-8 23.10. HOLIDAY 30.10.	MASS SPECTROMETRY	

Weeks 9-10 07. 11. 14. 11.	HPLC II CAPILLARY ELECTROPHORESIS HPLC: assay, purity tests, identification, detectors	PROJECT REPORT on week 10 (weeks 5-8)
Weeks 11-12 21. 11. 28. 11.	NMR SPECTROSCOPY (Seminar)	
Weeks 13-14 05.12 12.12	Plate-based methods, permeability measurements	PROJECT REPORT on week 13 (weeks 9-12) RETAKES on week 14