

**PHARMACY 4TH SEMESTER  
INSTRUMENTAL ANALYSIS**

**SPRING 2015/2016**

Weeks / Date		Lecture On Tuesday 8:00 -9:30 2.. Seminar Room	Practice On Friday 8:00 -11.00			
				Instructor	Workplace	
1.	02.02.	Introduction to Instrumental Analysis Prof. Ferenc Kilár	<b>Introduction</b>	Tímea Dergez Viktória Poór	SzKK B 102	
2.	09.02	Electroanalytical Chemistry Potentiometric Methods, Conductometric Methods Prof. Ferenc Kilár	<b>Potentiometric Methods Acid – Base Titration:</b> Titration of KOH solution using potentiometric end-point detection	Tímea Dergez Viktória Poór	SzKK B 102	
3.	16.02.	Introduction to Absorption Spectroscopy: Atomic spectroscopy Prof. Ferenc Kilár	<b>Conductometric Methods:</b> Titration of KOH solution using conductometric end-point detection  Determination of the temporary hardness of tap-water by conductometry	Tímea Dergez Viktória Poór	SzKK B 102 I	
4.	23.02.	Ultraviolet(UV) – Visible(VIS) and Spectrophotometry Prof. Ferenc Kilár	<b>Ultraviolet(UV) – Visible(VIS) Spectrophotometry:</b> Methylenblue concentration measurement by spectrophotometry	S.fotometry Tímea Dergez	Sp.f SzKK B 102	Gr A. Sp.f
5.	01.03.	Separation Technique / Gas Chromatography Prof. Ferenc Kilár	<b>Atomic spectrophotometry (AS)</b> Concentration determination of potassium ion (K <sup>+</sup> ) solution by atomic emission Spectroscopy Concentration determination of copper ion (Cu <sup>2+</sup> ) solution with atomic absorption spectroscopy	AS Csilla Páger Tímea Pernyeszi	AAS TTK C 111.	Gr. A AAS  GR. B SP.f
6.	08.03.	Separation Technique/ Liquid Chromatography / High - Performance Liquid Chromatography (HPLC) Electrophoresis / Capillary Electrophoresis (CE) I: Prof. Ferenc Kilár	Retake of the 2 <sup>nd</sup> and 3 <sup>rd</sup> practices	Tímea Dergez Viktória Poór	SzKK B 102 labor	

7.	15.03	HOLIDAY	<b>Gas chromatography (GC):</b> Gas chromatographic determination of normal alkanes	GC Viktória Poór Anita Bufa	Institute of Bioanalysis	Gr. A. GC
8.	29.03.	<b>Test 1.</b> Separation Technique/ Electrophoresis / Capillary Electrophoresis (CE) II. Prof. Ferenc Kílár	<b>High - Performance Liquid Chromatography (HPLC):</b> Quantitative analysis of active substance of Saridon analgetic	HPLC Viktor Sándor		Gr. A. HPLC
9.	05.04.	Mass Spectrometry. Prof. Ferenc Kílár	<b>Capillary Electrophoresis (CE):</b> Determination of preservatives and vitamin C with capillary zone electrophoresis (CZE)	CE Lilla Makszin Csilla Páger	Institute of Bioanalysis	Gr. A. CE
10	12.04	Nuclear Magnetic Resonance Spectroscopy (NMR) Dr. Zoltán Berente	<b>Mass Spectrometry (MS):</b> Structural analysis of capsaicin and dihidrocapsaicin by electrospray – ion trap MS and MS/MS methods	MS Viktor Sándor		Gr. B. MS
	.21.03- 25.03	<b>Spring holiday</b>	<b>Spring holiday</b>			:
11	19.04	Infrared Spectroscopy (IR) Dr. Tamás Kégl	<b>Nuclear Magnetic Resonance Spectroscopy (NMR)</b>  <b>Infrared Spectroscopy (IR)</b>	NMR Zoltán Berente	NMR SZKK C. building  TTK Dep. of Analytical Chemistry	Gr. A. NMR
12.	26.04	Fluorescency Ferenc Kílár		IR Tamás Kégl		Gr. B. IR
13	03.05.	<b>Test 2</b>	<b>Chip electrophoresis</b>	Lilla Makszin	Institute of Bioanalysis	
14.	10.05.	Thermal Methods Prof. Ferenc Kílár	<b>Final Practice</b>	?	SZZK B. 102.	

Spring Holiday (except ÁOSZ VI, FOSZ V. év és GYOSZ V. év):  
2016. 03. 21. – 2016. 03. 25. (Húsvét előtti hét)