

<i>Programme</i>	Chemistry BSc
<i>Course title</i>	Instrumental Analysis
<i>Name of lecturer</i>	Gyula Záray
<i>Type of course</i>	<u>compulsory</u> , semi-optional, elective
<i>Module</i>	non-chemical, <u>core-chemical</u> , specialized chemical, chemistry teacher
<i>Course code</i>	KA5AN3
<i>Number of credits</i>	4
<i>Year of study</i>	2
<i>Semester</i>	<u>fall</u> , spring
<i>Form of tuition</i>	<u>lectures</u> , practice, laboratory practice, other
<i>Course contents</i>	<p>Sampling and sample preparation methods;</p> <p><u>Atomic spectroscopy</u>: Atomic spectra; atomic absorption spectrometry; inductively coupled plasma atomic emission and mass spectrometry; X-ray fluorescence spectrometry; glow discharge atomic emission and mass spectrometry; hyphenated techniques for speciation of elements</p> <p><u>Molecular spectroscopy</u>: Molecular spectra; Ultraviolet and visible absorption spectrometry; molecular fluorescence spectrometry;</p> <p><u>Electroanalytical methods</u>: voltametry, potentiometry; stripping techniques;</p> <p><u>Separation techniques</u>: gas chromatography; high performance liquid chromatography;</p>
<i>Assessment method</i>	written/ <u>oral examination</u> , practical course mark, other
<i>Recommended reading</i>	Douglas A. Skoog, Donald M. West, F. James Holler: Fundamentals of Analytical Chemistry, Saunders College Publishing, 1992