

Module Handbook

Module Name:	Analytical Chemistry I (Practical)
Module Level:	Bachelor
Abbreviation, applicable: if	KIA202
Sub-heading, applicable: if	-
Courses included in the module, if applicable:	-
Semester/term:	Third / Second Year
Module coordinator(s):	Yanuardi Raharjo, S.Si., M.Sc
Lecturer(s):	Dr. Muji Harsini, M.Si Dra. Usreg Sri Handajani, M.Si Dr. Miratul Khasanah, M.Si Dra. Aning Purwaningsih, M.Si
Language:	Bahasa Indonesia
Classification within the curriculum	Compulsory course
Teaching format / class hours per week during semester:	2 hours laboratory work (50 min / hours)
Workload:	2 hours doing worksheet and pretest preparation, 2 hours laboratory work, 2 hours group discussion, searching literature and writing report, 13 week per semester, and total 78 hours per semester ~ 2.6 ECTS *
Credit Points:	1
Requirements:	Analytical Chemistry 1
Learning goals/competencies:	<p>General competence (skill): Ability to conduct a qualitative analysis of inorganic compounds based on concepts and theories related to analytical chemistry.</p> <p>Specific competence:</p> <ul style="list-style-type: none"> - Ability to prepare all the tools needed for the qualitative analysis of inorganic compounds - Ability to prepare reagents for the qualitative analysis of inorganic compounds - Ability to show the analysis of cations and anions from the standar substance - Ability to conclude cation by H₂S method based on the separation and determination of spesific cations. - Ability to conclude each anion by reaction of determination and specific - Ability to identify the cations with chromatography paper.
Content:	Analysis of cations with H ₂ S method, anion analysis with specific reagents, reagent usage drops to recognize cation and anion chromatography paper.
Soft skill	confidence and good performance individually
Study/exam achievements:	Student are considered to be competence and pass if at least get 55% of Laboratory reports and final exam.

	<p>Final score is calculated as follow: 60% Laboratory Reports and laboratory work + 40% final exam.</p> <p>Final index is defined as follow:</p> <p>A : 75-100 AB:70-74.99 B :65-69.9 BC:60-64.99 C : 55-59.99 D :40-49.99 E : 0-39.99</p>
Learning Methods	<ul style="list-style-type: none"> - lecture - working skills
Forms of Media:	Laboratory equipment.
Literature:	<ol style="list-style-type: none"> 1. Vogel, A.I., 1970, <i>Texbook of Macro and Semimicro Qualitative InorganicAnalysis</i>, 5th Ed, Longman Group, Ltd, London 2. Feigl, F., 1977.,<i>Qualitative Analysis by Spot Test.</i>, Elsevier Pub. Comp., New York
Notes:	<p>*Total ECTS = {(total hours workload x 50 min) / 60 min } / 25 hours</p> <p>Each ECTS is equals with 25 hours</p>