
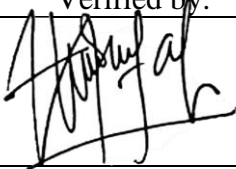
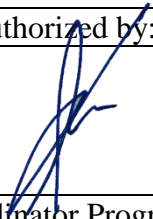




Faculty of Natural Sciences and Mathematics
Chemistry Department
Chemistry Education Study Program

Module Name		Chemical Research		
Module level, if applicable		3 rd year		
Code, if applicable		SPK-537		
Semester (s) in which the module is taught		5 th semester		
Person responsible for the module		Muhaimin, M.Sc		
Lecturer(s)		Muhaimin, M.Sc.		
Language		English- Indonesia		
Relation to curriculum		Compulsory		
Types of teaching and learning	Class size	Forms of active participation	Workload: 91 hours	
Lecture and discussion	50 – 60	Discussion	Laboratory work: 220 (min) x 16 (meeting)	59 hours
			Exam and preparation: 120 (min) x 16 (week)	32 hours
ECTS credit		3.25		
Credit points		2 SCU		
Requirements according to examination regulations		Minimum attendance at lectures is 75% (according to UII regulation)		
Recommended prerequisites		N/A		
Related course		Instrumental Chemistry		
Module objectives/intended learning		On successful completion of the course students should be able to: 1. apply the concepts of analytical chemistry, inorganic chemistry, organic chemistry, physical chemistry and instrumental chemistry to plan chemical research to be carried out 2. make innovations in chemical research carried out 3. carry out chemical research activities through independent practicum in the laboratory by taking into account the aspects of work safety and security		
Content		Research and research results, theory and literature review, data collection methods, sampling techniques, selection of statistical techniques, analysis, use of instrumentation in research, report writing: scientific articles.		

Study and examination requirements and forms of examination	Final score (NA) is calculated as follows:		
	Intended learning outcomes	Weight (%)	Technique of assessment
	1	25	Written test: assignment, midterm
	2	25	Written test: assignment, final examination
	3	50	Non test: paper
Media employed	Powerpoint slide presentation, video, Google classroom		
Reading lists	Lecture Team, 2018, Panduan Mata Kuliah Penelitian Kimia UII, Yogyakarta: FMIPA UII-Chemistry Education Study Program.		

Prepared by:	Verified by:	Authorized by:
		
Person responsible for the module	Student representative	Coordinator Program