

UNIVERSITAS NEGERI YOGYAKARTA FACULTY OF MATHEMATICS AND NATURAL SCIENCES DEPARTMENT OF CHEMISTRY EDUCATION JI. Colombo No. 1, Karangmalang, Yogyakarta Phone : +62 274 548203 e-mail: kimia@uny.ac.id Website: pendidikankimia.fmipa.uny.ac.id

Bachelor of Education in Chemistry

MODULE HANDBOOK

Module name:	Chemistry History and Perspective					
Module level, if applicable:	Undergraduate					
Code:	MPK 6212					
Sub-heading, if applicable:	-					
Classes, if applicable:	1					
Semester:	Odd					
Module coordinator:	Dr. Das Salirawati					
Lecturer(s):	Erfan Priyambodo, S.Pd.Si.,M.Si.					
Language:	Bahasa Indonesia and English					
Classification within the curriculum:	Elective Course					
Teaching format / class hours per week during the semester:	Lectures: 100 minutes lectures, 120 minutes structured activities and 120 minutes individual study per week					
Workload:	Total workload of the activity is 136 hours per semester which consist of 100 minutes lectures, 120 minutes structured activities, 120 minutes individual study per week.					
Credit points:	2SKS (3.28 ECTS)					
Prerequisites course(s):	-					
Course Outcomes	 After taking this course the students have ability to: CO1. show responsibility for the work given to them independently CO2. analyze the development of chemical concepts in the course of development of thought and work of chemists CO3. analyze the development of chemical concepts and their relevance to the sequence of stages of understanding the concept for chemical learners CO4. explain the application of chemical history in the process of learning chemistry at school 					
Content:	This course studies the development (history) of chemistry from prehistoric times to the early 20th century through a philosophical analysis of historical developments by emphasizing how chemists of the past thought and worked at the same time they also develop, evaluate, and use theory and new practical methods, and their applications in the process of learning chemistry in secondary schools.					
Study / exam achievements:	Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude. The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The final mark will be weight as follow:					

	No	СО	Assessment Object	Assessment Technique	Weight		
	1	CO1,	Activities	Presentation	10%		
		CO2,	Assignments	/ written test	40%		
		CO3,	Mid-term exam		25%		
		CO4.	Final Exam		25%		
				Total	100%		
Forms of media:	Board, LCD Projector, Laptop/Computer						
Diktat Sejarah dan Perspektif Kimia							
	 Poedjiadi S & Anna Poedjiadi (2001) Kimia dari zaman ke zama Bandung: Cendrawasih Hudson J (1992) The History of Chemistry New York: Chapman & Hall. 						
References:	Baird D, Scerri E & MnIntyre L (2006) Philosophy of chemistry						
	Springer						
Greenberg A (2007) From alchemy to chemistry in pict story New Hampshire: Wille Interscience Inc Publication							
	Partington J R (2011) A History of Chemistry 3rd Ed. Dover Publications.						

PLO and CO mapping

	PLO									
	Attitude		Knowledge Specific Skill		General Skill					
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6				
CO1					\checkmark					
CO2			\checkmark							
CO3			\checkmark							
CO4			\checkmark							