



# UNIVERSITAS NEGERI YOGYAKARTA

FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
DEPARTMENT OF SCIENCE EDUCATION

Jalan Colombo Nomor 1 Yogyakarta 55281

Telepon(0274)565411 Pesawat 217, (0274)565411(TU),fax (0274)548203

Laman :fmipa.uny.ac.id, E-mail :humas\_fmipa@uny.ac.id

## Bachelor of Education in Science

## MODULE HANDBOOK

Module name:	Skills in Chemistry
Module level, if applicable:	Undergraduate
Code:	IPA6238
Sub-heading, if applicable:	-
Classes, if applicable:	-
Semester:	3 <sup>th</sup> (first)
Module coordinator:	Putri Anjarsari, M.Pd
Lecturer(s):	Purwanti Widhy H, M.Pd, Putri Anjarsari, M.Pd
Language:	Bahasa Indonesia
Classification within the curriculum:	Compulsory Course
Teaching format / class hours per week during the semester:	100 minutes lectures and 120 minutes structured activities per week.
Workload:	Total workload is 90.67 hours per semester which consists of 100 minutes lectures and 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks.
Credit points:	2 (3 ETCS)
Prerequisites course(s):	General Chemistry 1 & 2
Targeted learning outcomes:	After taking this course the students have ability to: CO1. Show independence and responsible in carrying out individual tasks and group assignments CO2. Able to use knowledge systematically in solving problems related to applied chemistry in daily life CO3. mastering the basic principles of making some chemicals and products related to chemical processes used in households, such as nata, yoghurt, salted flavored eggs, VCO, essential oil, and recreational

	chemistry and science experiments																				
Content:	This course and practice develops scientific competencies, personality (attitudes) and skills (performance) of students in mastering the basic principles of making some chemicals and products related to chemical processes used in households, such as nata, yoghurt, salted flavored eggs, VCO, essential oil, and recreational chemistry and science experiments																				
Study / exam achievements:	<p>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 result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.</p> <p>The final mark will be weight as follow:</p> <table border="1"> <thead> <tr> <th>No</th> <th>CO</th> <th>Assessment Object</th> <th>Assessment Technique</th> <th>Weight</th> </tr> </thead> <tbody> <tr> <td rowspan="4">1</td> <td rowspan="4">CO2, CO3 and CO4</td> <td>a. Individual Assignment</td> <td rowspan="4">Presentation / written test</td> <td>15%</td> </tr> <tr> <td>b. Group Assignment</td> <td>15%</td> </tr> <tr> <td>c. Mid</td> <td>25%</td> </tr> <tr> <td>d. Final Exam</td> <td>30%</td> </tr> <tr> <td colspan="3">Total</td> <td>100%</td> </tr> </tbody> </table>	No	CO	Assessment Object	Assessment Technique	Weight	1	CO2, CO3 and CO4	a. Individual Assignment	Presentation / written test	15%	b. Group Assignment	15%	c. Mid	25%	d. Final Exam	30%	Total			100%
No	CO	Assessment Object	Assessment Technique	Weight																	
1	CO2, CO3 and CO4	a. Individual Assignment	Presentation / written test	15%																	
		b. Group Assignment		15%																	
		c. Mid		25%																	
		d. Final Exam		30%																	
Total			100%																		
Forms of media:	Board, LCD Projector, Laptop/Computer																				
Literature:	<p>A. Brown, Theodore, et .al, 1976, Chemistry the central science. Pearson: Pearson Pertice Hall.</p> <p>B. Chang, R., 2004, KIMIA DASAR (konsep-konsep inti), edisi ketiga, jilid 2, Erlangga, Jakarta</p> <p>C. Keenan, 1989, Kimia untuk Universitas, edisi keenam, jilid 2, Erlangga, Jakarta</p> <p>D. Silberberg, Martin S. 2006. Principles of General Chemistry. McGraw-Hill Higher Education.</p>																				

### PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12
CO1		✓										
CO2										✓		

CO3				✓	✓	✓	✓						
-----	--	--	--	---	---	---	---	--	--	--	--	--	--