

UNIVERSITAS NEGERI YOGYAKARTA

FACULTY OF MATHEMATICS AND NATURAL SCIENCES DEPARTMENT OF CHEMISTRY

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Bachelor of Science in Chemistry

MODULE HANDBOOK

Module name:	Toxicology						
Module level, if applicable:	Undergraduate						
Code:	KMA 6235						
Sub-heading, if applicable:	-						
Classes, if applicable:	-						
Semester:	6 th						
Module coordinator:	Prof. Dr. Nurfina Aznam, Apt.S.U						
Lecturer(s):	Prof. Dr. Nurfina Aznam, Apt.S.U						
Language:	Bahasa Indonesia						
Classification within the curriculum:	Elective Course						
Teaching format / class hours per week during the semester:	Lectures: 100 minutes lectures, 120 structured activities and 120 individual study per week						
Workload:	Total workload of the activity is 90,67 hours per semester which consists of 100 minutes lectures, 120 structured activities and 120 individual study per week for 16 weeks						
Credit points:	2 SK	2 SKS (3 ECTS)					
Prerequisites course(s):	-						
Course Outcomes	After taking this course, the students have ability to: CO1. explain the concepts of toxicology CO2. explain the toxicology benchmarks CO3. describe the factors that affect toxicity CO4. explain the toxic biotransformation CO5. explain the types of enzymatic metabolic reactions CO6. explain about types of toxicology CO7. describe the use of toxicology						
Content:	This course studies about the direction of toxicology, general principles and toxicology mindset, acute dose - chronic dose and dose response relationship, type of subject situation, toxicity, absorption, distribution, excretion, reactions that occur by hydrolysis oxidation reduction conjugation in air contaminants air contaminants and drugs, various kinds of toxicology, the use of toxicology.						
Study / exam achievements:	iner	ınaı mai	rk will be weight as	TOIIOW:			
	No	СО	Assessment Object	Assessment Technique	Weight		
	1	CO1, CO2,	Attitude and activity	Observation	10%		
		CO3, CO4, CO5,	Structural assignment: ability to	Assignment, Presentation, discussion	20%		

		CO6,	rasionalize and						
		CO6, Tasionalize and CO7 describing							
		COT	Structural						
	assignment:								
		assignment:							
			applying the						
			formula						
	according to								
	context								
	Structural assignment:								
		assignment:							
		ability to							
		collaborate,							
	analyze, rasionalize, and								
				,					
			communicate		100/				
			Individual	Assignment	10%				
			assignment:						
			skill to collect						
			literacy,						
			understanding,						
			and describing						
			Mid term exam	Written test	30%				
			Final exam	Written test	30%				
	Total 100								
Forms of media:			Projector, Video, ha	ndouts, PPT slides	s, and				
		naries							
Reference:			-	•	A. Gerard Marshall Raj and Ramasamy Raveendran. 2019.				
	Introduction to Basics of Pharmacology and Toxicology:								
	Vo	olume	1: General and	Molecular Phari	macology:				
	Vo Pr	olume rinciples	1: General and of Drug Action. 201	Molecular Pharman 9. 1st ed. Springer	macology:				
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PLO and CO mapping

СО	PLO									
	Attitude	Generic Skills		Knowledge				Specific Skills		
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10
CO1					✓					
CO2					✓					
CO3							✓			
CO4							✓			
CO5							✓			
CO6									✓	
CO7									✓	
CO8									✓	