Module Handbook

Module Name	Laboratory Management					
Module Level	Higher Diploma					
Code, if applicable	VKT432					
The subtitle, if	-					
applicable						
Courses, if applicable	-					
Semester(s) in which	4 th semester					
the module is taught						
A person responsible	Thorikul Huda, M.Sc.					
for the module	,					
Lecturer	Thorikul Huda, M.Sc.					
	Tri Esti Purbaningtias, M.Si.					
Language	Bahasa Ind	onesia				
Relation to curriculum	Compulsor	у.				
Type of teaching,	Lecture (fa	ce to face te	aching, struct	ured activitie	es, independen	t study
contact hours	and exam)	: 5.6 hours x	8 weeks per s	emester		-
	Practical cl	ass (ISO 170	25 document	drafting and	exam): 5.8 hou	urs x 8
	weeks per	semester				
Workload	Total	91 hours; 2	2 CU			
	Workloa					
	d					
		Face to	Structured	Independ	Document	Exam
		face	activities	ent study	drafting	
		teaching			practice	
	Hours	12	14	14	40	11
Credit Points	2 CU/3.4 E	СТЅ				
0.00.00	75% minimum requirements of attendance					
Requirements	75% minim	num requirer	nents of atter	idance		
Requirements according to the	75% minim	num requirer	nents of atter	idance		
Requirements according to the examination	75% minim	num requirer	nents of atter	idance		
Requirements according to the examination regulations	75% minim	num requirer	nents of atter	idance		
Requirements according to the examination regulations Recommended	75% minim	num requirer	nents of atter	idance		
Requirements according to the examination regulations Recommended prerequisites	75% minim	num requirer	nents of atter	Idance		
Requirements according to the examination regulations Recommended prerequisites Module	75% minim - 1. PLO 4: A	hum requirer	nents of atter	idance Ilyze data and	d communicate	e results
Requirements according to the examination regulations Recommended prerequisites Module objectives/intended	75% minim - 1. PLO 4: A reports	Able to comp	nents of atter lete work, ana y showing qua	idance Ilyze data and ality perform	d communicate ance.	e results
Requirements according to the examination regulations Recommended prerequisites Module objectives/intended learning outcomes	75% minim - 1. PLO 4: A reports 2. PLO 5: A	Able to comp effectively b Able to contr	nents of atter lete work, ana y showing qua ibute to solvir	Idance Ilyze data and ality perform ng problems i	d communicate ance. in the scope of	e results work.
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	11. Able to simulate and demonstrate the manufacture of quality
	documents in the testing and calibration laboratory
	12 Able to demonstrate internal audit practices and management
	reviews
Content	1 Laboratory management system requirements
content	2 Testing and calibration laboratory quality management system
	2. Internal audits and laboratory management reviews
	Clinical laboratory quality management system
	4. Childradol aboratorias and industrial laboratorias
	5. Educational laboratories and industrial laboratories
Study and examination	Midterm exams (25%), presentation (20%), role play (20%), document
requirements and	drafting practice (35%)
forms of	
examination	
Media employed	Google classroom, youtube, zoom meeting, google form, google doc
Reading list	1. Dittrich, E. ed., 2015. The Sustainable Laboratory Handbook: Design,
	Equipment, and Operation. John Wiley & Sons.
	2. Sitorus, M., Sutiani A., 2013 Pengelolaan Dan Manajemen
	Laboratorium Kimia, Graha Ilmu, Yogyakarta
	3. Günzler, H. ed., 2012. Accreditation and quality assurance in
	analytical chemistry. Springer Science & Business Media.
	4. Hadi, A., 2007, Pemahaman dan Penerapan ISO 17025: 2005,
	Gramedia Pustaka Utama, Jakarta
	5. ISO/IEC17025-2005: General Requirements for Competence of
	Testing and Calibration Laboratories
	6. ISO 15189:2007, Medical laboratories – Particular requirements for
	quality and competence versi Bahasa Inggris (E).
	7. Rosenlund, S.J., 1987. The chemical laboratory: its design and
	operation: a practical guide for planners of industrial, medical, or
	educational facilities. Noyes Publications.
	8. Psillos, D. and Niedderer, H. eds., 2006. Teaching and learning in the
	science laboratory (Vol. 16). Springer Science & Business Media.
	9. Petrozzi, S., 2012. Practical instrumental analysis: methods. quality
	assurance, and laboratory management. John Wiley & Sons.
	10. Henrie, S.A., 2015. Green Chemistry Laboratory Manual for General
	Chemistry, CRC Press.
	11. Ham, B.M. and Maham, A., 2015. Analytical chemistry: a chemist
	and laboratory technician's toolkit. John Wiley & Sons.
	 science laboratory (Vol. 16). Springer Science & Business Media. 9. Petrozzi, S., 2012. Practical instrumental analysis: methods, quality assurance, and laboratory management. John Wiley & Sons. 10. Henrie, S.A., 2015. Green Chemistry Laboratory Manual for General Chemistry. CRC Press. 11. Ham, B.M. and Maham, A., 2015. Analytical chemistry: a chemist and laboratory technician's toolkit. John Wiley & Sons.