

Module Handbook

Module Name:	Forensic Chemistry
Module Level:	Bachelor
Abbreviation, if applicable:	KIA305
Sub-heading, if applicable:	
Courses included in the module, if applicable:	
Semester/term:	2 / Fourth year
Module coordinator(s):	Dr. Djoko Agus Purwanto, Apt., MSi
Lecturer(s):	Dr. Djoko Agus Purwanto, Apt., MSi
	Prof. Dr. M. Yuwono, Apt., MS
	Dr. Magdalena Srihandayani, Apt., MS
Language:	Bahasa Indonesia
Classification within the curriculum:	Compulsory Course /Elective Studies
Teaching format/class hours per week during the semester:	100 minutes lectures, 13 lecture classes/semester
Workload:	Total 22 hours a semester
Credit Points:	2
Requirements:	Student must have taken Pharmaceutical Analysis I (KIA206) and Pharmaceutical Analysis II (KIA307) courses.
Learning goal/competencies:	<p>Knowledge</p> <ul style="list-style-type: none"> - To understand the concept of basic chemistry analysis in forensic evidences. <p>Skills</p> <ul style="list-style-type: none"> - Honesty, discipline and active in discussion. <p>Competence</p> <ul style="list-style-type: none"> - To understand and able to apply the concept of analyzing substances in forensic evidences whether in its original compound or in its metabolites form. - To understand and able to apply the concept of analyzing substances used in doping. - To understand and able to apply the concept of analyzing narcotics and psychotropic substances used by drug users.
Content:	Matters related to forensic chemistry which are reviewed and analyzed chemically ranging from document forgery, ink stamp, signature, analysis of dust, dirt, paint until the DNA fingerprint analysis. Analysis of compound or metabolites used for doping and drugs both inside or outside human body including its form after excreted in urine, sweat and hair
Study/exam achievements:	<p>Student are considered to be competent and pass if at least get 50% of maximum mark of the exams based learning.</p> <p>Final score (NA) is calculated as follow : 40% Exam I + 40% Exam II + 20% Assignment</p> <p>Final index is defined as follow : A : 100 > NA > 75</p>

	<p>AB : 75 > NA > 70 B : 70 > NA > 65 BC : 65 > NA > 60 C : 60 > NA > 55 D : 55 > NA > 50 E : 50 < NA</p>
Forms of Media:	LCD projector, whiteboard, internet.
Literature:	<p>1. Richard Saferstein, 2015. Forensic Science: From the Crime Scene to the Crime Lab (3rd Edition) Forensic Science: From the Crime Scene to the Crime Lab (3rd Edition)</p> <p>2. James, S.H and Nordby, J.J, 2014. Forensic Science: An Introduction to Scientific and Investigative Techniques, Fourth Edition.</p>
	3. Rapley, R., and Whitehouse, D., 2007. Molecular Forensics. 4 th ed, Wiley.
	4. Zolotov, Ivanov, and Amelin, 2002. Chemical Test Methods of Analysis, Volume 36, 1st Edition.
	5. Thieme, D., and Hemmersbach, P., 2010. Doping in Sports: Biochemical Principles, Effects and Analysis. Springer.
Notes:	The course is more concept of analytical chemistry comprehensive used in forensic field.