

MODULE HANDBOOK

Course	Basic Experimental Chemistry II
Module Level:	Bachelor
Code	KID104
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/Term:	2 nd / First Year
Module Coordinator:	Dra. AningPurwaningsihM.Si,
Lecturer(s):	Dra. Aning Purwaningsih, M.Si.; Dr. Ir.Suyanto, M.Si.; Dra. Usreg Sri Handajani, M.Si.; M Zaki Fahmi, S.Si.M.Si. Ph.D.; Siti Wafiroh, S.Si, M.Si.; Harsasi S.Si. M.Si.; Yanuardi Raharjo,S.Si, M.Sc.; Ahmadi Jaya Permana, S.Si, M.Si.; Sofijan Hadi, S.Si. M.Si.; Dr. Purkan, M.Si.; Dr. Sri Sumarsih, M.Si.
Language:	Bahasa Indonesia
Classification within the Curriculum:	Compulsory Course / Elective Studies
Teaching format / class hours per week during semester:	2 hours laboratory work (50 min / hours)
Workload:	2 hours doing worksheet and pretest preparation, 2 hours laboratory work, 2 hours group discussion, searching literature and writing report, 13 weeks per semester, and total 78 hours per semester 2.6 ECTS *
Credit Points:	1
Requirement(s):	This course can be taken simultaneously with General Chemistry II (KID103) lecture.
Learning Goals/Competencies:	<p>General Competence (Skill) : Able to prepare and assemble the tools and practice for material buffer solution, reactions of carbohydrates, amino acids and protein, the type of colloidal solids in liquids and nature, electrolysis, reactions of lipid / fat, levels of acid and alkaline, water content , the properties of alcohol and the identification of several elements.</p> <p>Specific Competence:</p> <ol style="list-style-type: none"> 1. Able to discern the strength of a buffer solution 2. Able to identify the compound class of carbohydrates, amino acids, protein lipid / fat and alcohol 3. Able to distinguish a wide variety of colloids 4. Able to show the reaction of electrolysis in a solution of KI 5. Able to calculate the acid or base concentration of a sample 6. Able to calculate the water levels of a compound 7. Able to identify some elements
Content:	Experiment buffer solution, carbohydrates, protein, SOL (solid colloidal systems in liquid), electrolysis, fat, acidimetry and alkalimetry, determination of water, alcohol and Introduction to Some elements.
Soft Skill Attribute:	Group, logic and ethics

Study/Exam Achievements:	<p>Students are considered to be competent and passed if at least get 55.</p> <ol style="list-style-type: none"> 1. Daily Value: pretest 20%, 40% experiemntal work (including timely attendance, including submitting the experiment journals on time, skills and activeness during experiment, observations made, and the cleanliness of the table after experiment), discussion 20%, experiment reports 20%. 2. Final Exam (Written Test) <p>Final daily score = 60% daily value + 40% final examination score</p> <p>Final index is defined as follow:</p> <p>A : 75 – 100 AB : 70 - 74.99 B : 65 - 69.99 BC : 60 - 64.99 C : 55 - 59.99 D : 40 - 54.99 E : 0 - 39.99</p>
Learning Methods:	Experiment in laboratory and discussion
Forms of Media:	LCD, white boarda and experiment guidance
Literature(s):	<ol style="list-style-type: none"> 1. Kaiser, R.W. and Griffith, C. H., 1991. <i>General Chemistry Laboratory Manual</i>, 2nd ed., Ginn Press, Kentucky. 2. Raymond Chang., 2004, <i>Kimia Dasar (Konsep Konsep Inti)</i>, Edisi Ketiga, Erlangga, Jakarta 3. Vogel, A.I., 1979, <i>Textbook of Macro and Semimicro Qualitative Inorganic Analysis</i>, 5th Ed, Longman Group, Ltd., London 4. Whitten, K.D., and Dari, R.E., 1992, <i>General Chemistry and Qualitative Analysis</i>, 4th Ed, Saunders Pub, Orlando
Notes:	<p>*Total ECTS = {(total hours workload x 50 min) / 60 min } / 25 hours</p> <p>Each ECTS is equals with 25 hours</p>