

Module Handbook

Module Name:	General Chemistry II (Practical)
Module Level:	Bachelor
Abbreviation, if applicable:	KID104
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/term:	2 nd / First Year
Module coordinator(s):	Dra. AningPurwaningsihM.Si,
Lecturer(s):	Dra. Aning Purwaningsih, M.Si ,Dr. Ir.Suyanto M.Si,Dra. Usreg Sri Handajani, M.Si , M Zaki Fahmi SSi,MSi, Ph.D, Siti Wafiroh, S.Si, M.Si Harsasi S.Si. M.Si, Yanuardi Raharjo ,S.Si, M.Sc, Ahmadi Jaya Permana, S.Si, MSi, Sofijan Hadi, SSi, MSi , Dr. Purkan MSi, Dr. Sri Sumarsih Msi
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 week per semester, and total 78 hours per semester ~ 2.6 ECTS *
Credit Points:	1
Requirements:	already taken / can be taken simultaneously with lecture General Chemistry II (KID103)
Learning goals/competencies:	<p>General competence (skill) : Able to prepare and assemble the tools and practices used for the 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. Being able to discern the strength of a buffer solution 2. Be able to identify the compound class of carbohydrates, amino acids, protein lipid / fat and alcohol 3. Being able to distinguish a wide variety of colloids 4. Able to show the reaction of electrolysis in a solution of KI 5. Being able to calculate the concentration of acid or base of a sample 6. Able to calculate the water levels of a compound 7. Being able to identify some of the 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	The Discipline of presence, submitting journal, hygiene of laboratory table

Study/exam achievements:	<p>Students are considered to be competent and pass if at least get 55.</p> <ol style="list-style-type: none"> 1. Daily Value: pretest 20%, 40% lab work (including timely attendance, including the on time of collecting journals, skills and activeness during practicum, observations made, and the cleanliness of the table after a practicum), discussion 20%, reports 20%. 2. UAS (Written Test) <p>Final daily Score = 60% + 40% Final examination (UAS) score</p> <p>Table Value Graduation</p> <p>A: 100> NA≥75 AB : 74,9≥NA≥70 B: 69,9≥NA≥65 BC: 64,9≥NA≥60 C: 59,9≥NA≥55 D: 54,9≥NA≥40 E: 39,9≥NA</p>
Learning Methods	Practicum,and discussion
Forms of Media:	OHP,LCD, white board, practicum guidance
Literature:	<ol style="list-style-type: none"> 1.Kaisar, R.W. and Griffith, C. H., 1991. General Chemistry Laboratory Manual, 2nd ed., Ginn Press, Kentucky. 2. Raymond Chang., 2004, Kimia Dasar (Konsep Konsep Inti), Edisi Ketiga , Erlangga , Jakarta 3.Vogel, A.I., 1979, Textbook of Macro and Semimicro Qualitative Inorganic Analysis, 5th Ed, Longman Group, Ltd., London 4. Whitten, K.D., and Dari, R.E., 1992, General Chemistry and Qualitative Analysis, 4th Ed, Saunders, Publ., 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>