MODULE HANDBOOK

Module Name	Industrial Chemistry
Module level	Bachelor
Abbreviation, if applicable	8420402147
Sub-heading, if applicable	-
Course included in the module, if applicable	-
Semester/term	4th/Second Year
Module coordinator(s)	Dr. Nuniek Herdyastuti, M.Si
Lecturer(s)	Prof. Dr. Titik Taufikurrohmah, M.Si and Dian Novita, M.Pd
Language	Indonesian
Classification within the curriculum	Elective Course
Teaching format/class hours per week during the semester:	2 hours lecturers (50 min per hours)
Workload:	1 CU for bachelor degree equals to 3 workhours per week or 170 minutes (50' face to face learning, 60' structured learning, and 60' independent learning). In one semester, courses are conducted in 14 weeks (excluding mid and end-term exam). Thus, 1 CU equals to 39.67 workhours per semester. One CU equals to 1.59 ECTS
Credit points:	2 CU = 2 x 1.59 = 3.18 ECTS
Prerequisites course(s):	-
Targeted learning outcomes:	CLO 1 Students have the ability to cooperate in practicum process. CLO 2 Students are skilled in using tools in practicing the process. CLO 3 Students have knowledge of the principles, basic concepts, and chemical processes in the chemical industry, covering industries: the petrochemical industry; oils that include essential oils and oils from biji2an; fermentation industries include tempeh, soy sauce, yogurt and wine, soap and detergent; paper industry including recycled paper; carbon industry of various raw materials; as well as the cosmetic industry, including facial soaps, various beige faces, shampoos and cosmetic dyes.
Content:	**Introduction** : Understand learning contracts, scoring systems and some examples of chemical process types in the industry **Industrial Chemicals in Petrochemicals :** Chemical processes in the industry in petrokomia and its applications **Chemical Processes in the Oil Industry :** chemical processes in the oil industry, refining essential oils, insulation of oils from grains **Chemical Process in Fermentation Industry:** understand fermentation process and product manufacturing process related to fermentation industry (making soy sauce, soygurt, cheese, etc.)

	Chemical Process in Soap and Detergent Industry: understand the chemical processes in the soap and detergent industry and understand the process of making products related to the soap and detergent industry **Chemical Processes in the paper industry:** understand the chemical processes in the paper industry and understand the process of making products related to the paper industry including recycled paper **Chemical Process in cosmetic industry:** understand chemical processes in cosmetic industry and understand the process of making products related to cosmetic industry
Study / exam achievements:	Students are considered to be competent and pass if at least get 55 Final score is calculated as follows: 20% participation + 30% assignment + 20% middle exam (UTS) & 30% final exam (UAS) Table index of graduation • A = 4 ($85 \leq - \geq 100$) • A- = 3,75 ($80 \leq - < 85$) • B+ = 3,5 ($75 \leq - < 80$) • B = 3 ($70 \leq - < 75$) • B- = 2,75 ($65 \leq - < 75$) • C+ = 2,5 ($60 \leq - < 65$) • C = 2 ($55 \leq - < 60$) • D = 1 ($40 \leq - < 55$) • E = 0 ($0 \leq - < 40$)
Media:	Computer, LCD, White board
Learning Methods	Individuals assignment, group assignment, discussion, presentation, and practicum
Literature:	1. Austin. G., 1986, "The Chemical Proses Industries", New York : Mc Graw-Hill. 2. Current journals related to each topic.