MODULE HANDBOOK

Module Name	Qualitative Analytical Chemistry
Module level	Bachelor
Abbreviation, if applicable	8420402094
Sub-heading, if applicable	-
Course included in the module, if applicable	-
Semester/term	2nd / first year
Module coordinator(s)	Prof. Dr. Sri Poedjiastoeti, M.Si.
Lecturer(s)	Prof. Dr. Sri Poedjiastoeti, M.Si., Dr. Maria Monica Sianita, M.Si; Rusmini S.Pd., M.Si
Language	Bahasa Indonesia
Classification within the curriculum	Compulsory
Teaching format/class hours per week during the semester:	2 hours lectures (50 min / hour)
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):	Basic chemistry 1
Targeted learning outcomes:	CLO 1: Students are able to collect information from various sources, both ICT and non-ICT, so that they have knowledge of supporting theories, experimental techniques and how to carry out qualitative analysis. CLO 2: Skilled students use tools and materials in conducting qualitative analysis through the stages of preliminary analysis, analysis of cations and anions in a compound and the reactions that occur. CLO 3: Students have the ability to work together and be responsible for conducting a quality analysis. CLO 4: Students have the ability to communicate their knowledge and skills in the form of the results of qualitative analysis of chemical compounds in single or multiple samples
Content:	1. supporting theory in qualitative analysis 2. qualitative analysis experimental techniques 3. preliminary analysis 4. cation analysis in general 5. cation analysis group I 6. analysis of group II cations 7. cation analysis group III 8. cation analysis for group IV 9. analysis of group V cations 10. Anion analysis

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 ≤-≥ 100) • A- = 3,75 (80 ≤-< 85) • B+ = 3,5 (75 ≤- < 80) • B = 3 (70 ≤-< 75) • B- = 2,75 (65 ≤-<75) • C+ = 2,5 (60 ≤-<65) • C = 2 (55 ≤-<60) • D = 1 (40 ≤-<55) • E = 0 (0 ≤-<40)
Media:	Computer, LCD, White board, laboratory
Learning Methods	Individuals assignment, group assignment, discussion, presentation, and practicum
Literature:	1. Sawyer, Heineman, and Beebe.1984. *Chemistry Experiments for Instrumental Methods*. New York: John Wiley & Sons 2. Svehla, G, 1979. *Vogel's Text Book of Macro and Semimicro Qualitative Inorganic Analysis. Fifth ed*. London: Longman Group Limited 3. Sorum, Clarence Harvey, and Lagowski, J. J. 1977. *Introduction to Semimicro Qualitative Analysis*. United State of America: Prentice-Hall Inc 4. Briggs, J. G. R. 2000.Chemistry for GCE 'O' Level Practical Workbook. Singapore: Pearson Education Asia Pte Ltd 5. Poedjiastoeti, S., Monica, M., Sukarmin, dan Rusmini. 2016. Kimia Analisis Kualitatif. Surabaya: Unesapress
Note	Qualitative Analytical Chemistry covers the activities of theory, practicum and presentation.