



MODULE HANDBOOK

Module Name:	Qualitative Analytical Chemistry
Module level:	Bachelor
Course Code:	8420402094
Abbreviation, if applicable:	-
Course included in the module, if applicable:	-
Semester/term:	2 nd /First Year
Module coordinator(s):	Prof. Dr. Sri Poedjiastoeti, M.Si.
Lecturer(s):	1. Prof. Dr. Sri Poedjiastoeti, M.Si. 2. Dr. Maria Monica Sianita, M.Si. 3. Rusmini S.Pd., M.Si.
Language:	Bahasa Indonesia
Classification within the Curriculum:	Compulsory Course
Teaching format/class hours per week during the semester:	2 hours lectures (50 min / hour)
Workload:	3 x 50 minutes lectures, 3 x 60 minutes structured activity, 3 x 60 minutes individual activity, 14 weeks per semester, 119 total hours per semester ~ 4.77 ECTS**
Credit unit:	2 CU = 2 x 1.59 = 3.18 ECTS
Prerequisite 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



MINISTRY OF EDUCATION, CULTURE, RESEARCH,
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FACULTY OF MATHEMATICS AND NATURAL SCIENCES

DEPARTMENT OF CHEMISTRY

Ketintang Campus, Jalan Ketintang, Surabaya 60231

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	<ol style="list-style-type: none">5. cation analysis group I6. analysis of group II cations7. cation analysis group III8. cation analysis for group IV9. analysis of group V cations10. Anion analysis																														
Study / exam achievements:	<p>The final grade (NA) is calculated based on the following ratio:</p> <table border="1"><thead><tr><th>Assessment Components</th><th>Percentage of contribution</th></tr></thead><tbody><tr><td>Participation</td><td>20%</td></tr><tr><td>Assignment</td><td>30%</td></tr><tr><td>Mid-semester test</td><td>20%</td></tr><tr><td>Final semester test</td><td>30%</td></tr></tbody></table>	Assessment Components	Percentage of contribution	Participation	20%	Assignment	30%	Mid-semester test	20%	Final semester test	30%																				
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Media:	Computer, LCD, White board, laboratory																														
Learning Methods:	Individuals assignment, group assignment, discussion, presentation, and practicum																														
Literature:	<ol style="list-style-type: none">1. Sawyer, Heineman, and Beebe.1984. <i>Chemistry Experiments for Instrumental Methods</i>. New York: John Wiley & Sons2. Svehla, G, 1979. <i>Vogel's Text Book of Macro and Semimicro Qualitative Inorganic Analysis</i>. Fifth ed. London: Longman Group Limited3. Sorum, Clarence Harvey, and Lagowski, J. J. 1977. <i>Introduction to Semimicro Qualitative Analysis</i>. United State of America: Prentice-Hall Inc4. Briggs, J. G. R. 2000. <i>Chemistry for GCE 'O' Level Practical Workbook</i>. Singapore: Pearson Education Asia Pte Ltd5. Poedjiastoeti, S., Monica, M., Sukarmin, dan Rusmini. 2016. <i>Kimia Analisis Kualitatif</i>. Surabaya: Unesapress																														



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Notes:	<p>*1 credit unit or <i>sk</i>s in learning process = three periods consist of: (a) scheduled instruction in a classroom or laboratory (50 minutes); (b) structured activity (60 minutes); and (c) individual activity (60 minutes) according to the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 44 Year 2015 jo. the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 50 Year 2018.</p> <p>**1 credit unit or <i>sk</i>s = 1.59 ECTS according to Rector Decree Of Universitas Negeri Surabaya No. 598/UN38/HK/AK/2019</p>
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