MODULE HANDBOOK

Module Name	Main Elements of Inorganic Chemistry
Module Level	Bachelor
Abbreviation, if applicable	8420402114
Sub-heading, if applicable	-
Course included in the module, if applicable	-
Semester/term	6th/ third year
Module coordinator(s)	Dina Kartika Maharani, S.Si., M.Sc
Lecturer(s)	1. Dr. Achmad Lutfi, M.Pd. 2. Dr. Muchlis, M.Pd. 3. Dina Kartika M., S.Si., M.Sc, 4. Kusumawati Dwiningsih, S.Pd., M.Pd. 5. Rusly Hidayah, S.Si., M.Pd.
Language	Bahasa Indonesia
Classification within the curriculum	Compulsory Course
Teaching format/class hours per week during the semester	3 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 point	3 CU = 3 x 1.59 = 4.77 ECTS
Prerequisite Course(s)	General Chemistry II
Learning Outcomes	**General Competence (knowledge)**: Students can mastering theoretical concepts on the structure, dynamics and energy of chemicals, as well as the basic principles of separation, analysis, synthesis and characterization of main group elements **Specific Competence** : At the end of the lecture, students can understand the position, physico-chemical properties, laboratory manufacture, types of compounds and their uses of Alkali Metals, Alkaline Earth metals, Boron, Carbon, Nitrogen, Oxygen, Halogens, Noble Gases.
Content	Course materials discuss the understanding of Role and status of theory in Inorganic chemistry, Origin of elements, Classification of elements in the periodic system; Hydrogen and its compounds: Position in the periodic table, Physical and chemical properties, Isotopes of hydrogen, Hybrids of elements, Water and related matters; Source and extraction, physico-chemical properties and uses, manufacture, properties and uses: Alkali Metals, Alkaline Earth metals,

<table>
<tr><td></td><td>Boron, Carbon, Nitrogen, Oxygen, Halogens, Noble Gases</td></tr>
<tr><td>Study/exam achievements</td><td>Students are considered to complete the course and pass if they obtain at least 40% of maximum final grade. The final grade (NA) is calculated based on the following ratio:
<table>
<tr><th>Assessment Components</th><th>Percentage of contribution</th></tr>
<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>
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<tr><td>Forms of media</td><td>Computer, LCD, White board</td></tr>
<tr><td>Learning Methods</td><td>Lectures, discussion, assignment</td></tr>
<tr><td>Literature</td><td>1. Lee, J.D. 1991. Concise Inorganic Chemistry. Four Edition. London: Chapman & Hall.
2. Madan, R.D. 1997. Modern Inorganic Chemistry. New Delhi: S. Chand and Company LDT.
3. Sugiarto, B. dkk. 1997. Kimia Anorganik. Surabaya: Unipress IKIP Surabaya.
4. Perry, Dale L. 2011. Handbook of Inorganic Compounds, Second Edition (Hardcover) – May 18, 2011. ISBN-13: 000-1439814619 ISBN-10: 14398146</td></tr>
<tr><td rowspan="2">Notes:</td><td>*1 CU 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.</td></tr>
<tr><td>**1 CU = 1.59 ECTS according to Rector Decree Of Universitas Negeri Surabaya No. 598/Un38/Hk/Ak/2019</td></tr>
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