

## MODULE HANDBOOK

Module Name	<b>Inorganic Chemistry 3</b>
Module Level	Bachelor
Abbreviation, if applicable	<b>3074213046</b>
Sub-heading, if applicable	-
Course included in the module, if applicable	-
Semester/term	6 <sup>th</sup> / third year
Module coordinator(s)	Dina Kartika Maharani, S.Si., M.Sc
Lecturer(s)	<b>Dr. Achmad Lutfi, M.Pd.; Dr. Muchlis, M.Pd.; Dina Kartika M., S.Si., M.Sc, Kusumawati D., S.Pd.,M.Pd.; Rusly Hidayah, S.Si., M.Pd.</b>
Language	Bahasa Indonesia
Classification within the curriculum	Compulsory
Teaching format/class hours per week during the semester	2 hours lectures (50 min / hour)
Workload	2 hours lecture, 2hours structured activities, 2 hours individual activities, 15 week a semester, and total 90 hours a semester 3.5 ECTS *
Credit point	3 SCU
Requirement	General Chemistry II
Learning Outcomes	<p><b>General Competence (knowledge):</b> 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</p> <p><b>Specific Competence :</b> 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.</p>

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, Boron, Carbon, Nitrogen, Oxygen, Halogens, Noble Gases
Study/exam achievements	Students are considered to be competent and pass if at least get 55  Final score is calculated as follows: 20% assignment + 30% Task + 20% Table index of graduation <ul style="list-style-type: none"> <li>• A = 4 (85 - 100)</li> <li>• A- = 3,75 (80 - 85)</li> <li>• B+ = 3,5 (75 - 80)</li> <li>• B = 3 (70 - 75)</li> <li>• B- = 2,75 (65 - 75)</li> <li>• C+ = 2,5 (60 - 65)</li> <li>• C = 2 (55 - 60)</li> <li>• D = 1 (40 - 55)</li> <li>• E = 0 (0 - 40)</li> </ul>
Forms of media	Computer, LCD, White board
Learning Methods	Lectures, discussion, assignment
Literature	<ol style="list-style-type: none"> <li>1. Lee, J.D. 1991. <i>Concise Inorganic Chemistry</i>. Four Edition. London: Chapman &amp; Hall.</li> <li>2. Madan, R.D. 1997. <i>Modern Inorganic Chemistry</i>. New Delhi: S. Chand and Company LDT.</li> <li>3. Sugiarto, B. dkk. 1997. <i>Kimia Anorganik</i>. Surabaya: Unipress IKIP Surabaya.</li> <li>4. Perry, Dale L. 2011. <i>Handbook of Inorganic Compounds, Second Edition (Hardcover)</i> – <b>May 18, 2011</b>. ISBN-13: 000-1439814619 ISBN-10: 14398146</li> </ol>
Note	<ol style="list-style-type: none"> <li>1. This course is divided into two parallel classes with the materials and ingredients but given the same test in the same time with different lecturers.</li> <li>2. This course is half of the subjects of the basic organic and are in a series with the course of Organic Chemistry II, in addition to the Organic Chemistry I and Organic Chemistry II is a subject which underlies subjects- more courses in organic chemistry.</li> </ol> <p>*Total ECTS = { (total hours workload x 50 min ) / 60 min } / 25 hours <b>Each ECTS is equals with 25 hours</b></p>