

## Module Handbook

Module Name:	<b>Inorganic Chemistry II</b>
Module Level:	Bachelor
Abbreviation, if applicable:	KII 203
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/term:	4 <sup>th</sup> / Second Years
Module coordinator(s):	Dr. Hartati, M.Si
Lecturer(s):	Harsasi Setyawati, S.Si, M.Si; Ahmadi Jaya Permana, S.Si, M.Si; Satya Candra Wibawa Sakti, S.Si, M.Si, Ph.D
Language:	BahasaIndonesia
Classification within the curriculum	Compulsory Course / <del>Elective Studies</del>
Teaching format / class hours per week during semester:	3 hours lectures ( 50 min / hour)
Workload:	3 hours lectures, 3 hour structural activities, 3hours individual study, 13 week per semester, and total 117hours per semester ~ 3.9 ECTS *
Credit Points:	3
Requirements:	Inorganic ChemistryI
Learning goals/competencies:	<p><b>General Competence (knowledge):</b> Are able to analyze the nature, structure and bonding in the compound / molecule reactions as well as the basic principles and non-metallic elements.</p> <p><b>Specific Competence :</b></p> <ol style="list-style-type: none"> <li>1. Being able to decipher the elements and alkali metal compounds, elements and alkaline earth metal compounds, semi-metallic elements and compounds: Al, Ge, Sn, Pb, Bi. Transition metals group III B: Sc, Y and its compounds, transition metals Group IV B: Ti, Zr, Hf, elements of transition metals groups VB: V, Nb, Ta, elements of the transition metal groups VIB: Cr, Mo, W, elements of transition metals group VIIB: Mn, Tc, Re, elements of transition metals group VIII B: Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, an element of transition metal group IB: Cu, Ag, Au , transition metal elements of group II B: Zn, Cd, Hg.</li> <li>2. Ability to categorize elements of the transition metals.</li> </ol>
Content:	Properties of elements and compounds by metallic electron structure of atoms, including alkali metals, alkaline earth metal spring aluminum, lead, tin, germanium and bismuth, and the transition metal series 1, 2, 3 (Class IB - VIIB). Extraction, metallurgy, as well as the use of elements and compounds, metals and semi-metals.
Attribut soft skill	Discipline and effort
Study/exam achievements:	Students are considered to be competent and pass if at least get 55  The final value is calculated as follows: 20% + 10% duty soft skill +

	<p>middle exams (UTS) 35% + final exams (UAS) 35%</p> <p>Table Value Graduation  A: 100&gt; NA≥75  AB: 74,9≥NA≥70  B: 69,9≥NA≥65  BC: 64,9≥NA≥60  C: 59,9≥NA≥55  D: 54,9≥NA≥40  E: 39,9≥NA</p>
Forms of Media:	Slides and LCD projectors, whiteboards
Lecturing methods	Lectures, discussion
Literature:	<ol style="list-style-type: none"> <li>1. Miessler, G.L., Fischer, P.J., and Tarr, D.A., 2014, Inorganic Chemistry 5th ed, Prentice Hall, International Inc., New Jersey</li> <li>2. Huheey, J. E., Keiter, E. A. and Keiter, R. L., 1993, Inorganic Chemistry, Principles of Structure and Reactivity, 4th ed., Harper and Publisher, New York</li> <li>3. Cotton, F.A, Wilkinson, G., and Gaus, P.L., 1987, Basic Inorganic Chemistry, 3 th ed., John Wiley and Sons, New York</li> <li>4. Prakash, S, Tuli, Basu and Madan, 1980, Advanced inorganic Chemistry, 15th ed, Chand &amp; Company Ltd., Ram Nagar, New Delhi.</li> <li>5. Madan, R.D., and prakash, S., 1997, Modern Inorganic Chemistry, S. Chand and Company Ltd, Ram Nagar, New Delhi.</li> <li>6. Cotton, F.A., Wilkinson, G., and Gaus, P.L., 1989, ( terjemahan oleh Sahati Suharto) Kimia Anorganik Dasar, UI Press, Jakarta</li> </ol>
Notes:	<p>*Total ECTS = {(total hours workload x 50 min ) / 60 min } / 25 hours</p> <p><b>Each ECTS is equals with 25 hours</b></p>