MODULE HANDBOOK

| Module Name | Main Elements of Inorganic Chemistry |
|-----------------------------|--|
| Module Level | Bachelor |
| Abbreviation, if | 3074213046 |
| applicable | |
| Sub-heading, if | - |
| applicable | |
| Course included in the | - |
| module, if applicable | |
| Semester/term | 6 th / 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 | Compulsory |
| the curriculum | Compulsory |
| Teaching format/class hours | 3 hours lectures (50 min / hour) |
| per week during | |
| the semester | |
| 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 endterm exam). Thus, 1 CU equals to 39.67 workhours per semester. One CU equals to 1.59 ECTS. |
| Credit point | 3 CU = 3 x 1.59 = 4.77 ECTS |
| Requirement | 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, |
| | Boron, Carbon, Nitrogen, Oxygen, Halogens, Noble Gases |
| | Boton, Carbon, Nitrogen, Oxygen, Harogens, Nobie Gases |
| Study/exam | Students are considered to be competent and pass if at least |
| achievements | get 55 |
| | |
| | Final score is calculated as follows: 20% assignment + 30% |
| | Task + 20% |
| | Table index of graduation |
| | • A = $4 (85 \le -2 100)$ |
| | • A- = $3.75 (80 \le -4.85)$ |
| | • B+ = $3.5 (75 \le -4.80)$ |
| | • B = 3 (70 ≤-< 75) |
| | • B- = 2,75 (65 ≤-<75) |
| | • $C+=2.5 (60 \le -< 65)$ |
| | • $C = 2(55 \le -60)$ |
| | • D = 1 $(40 \le -<55)$ |
| | • $E = 0 (0 \le -40)$ |
| Forms of media | Computer, LCD, White board |
| Learning Methods | Lectures, discussion, assignment |
| Literature | 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. Miesler, Fischer, Tarr. 2014. Inorganic Chemistry. 5 th . |
| | Pearson |
| | 4. Education Inc.Perry, Dale L. 2011. Handbook of |
| | Inorganic Compounds, Second Edition (Hardcover) – May |
| | 18, 2011. ISBN-13: 000-1439814619 ISBN-10: 14398146 |
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