**Module Handbook**

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| **Module Name** | Inorganic Chemistry | | | | |
| **Module Level** | Higher Diploma | | | | |
| **Code, if applicable** | VKD217 | | | | |
| **Subtitle, if applicable** | - | | | | |
| **Courses, if applicable** | - | | | | |
| **Semester(s) in which the module is taught** | 2nd semester | | | | |
| **Person responsible for the module** | Bayu Wiyantoko, S.Si., M.Sc.<br>Ganjar Fadillah, S.Si., M.Si. | | | | |
| **Lecturer** | Bayu Wiyantoko, S.Si., M.Sc.<br>Ganjar Fadillah, S.Si., M.Si. | | | | |
| **Language** | Bahasa Indonesia | | | | |
| **Relation to curriculum** | Compulsory | | | | |
| **Type of teaching, contact hours** | Lectures: 100 min/week<br>Structured Assignments/structured activities: 120 min/week<br>Online Activity/individual study: 120 min/week | | | | |
| **Workload** | Total Workload | 91 hours; 2 CU | | | |
| | | Face to face teaching | Structured activities | Independent study | Exam |
| | Hours | 24 | 28 | 28 | 11 |
| **Credit Points** | 2 CU/3,4 ECTS | | | | |
| **Requirements according to the examination regulations** | 75% minimum requirements of attendance | | | | |
| **Recommended prerequisites** | | | | | |
| **Module objectives/intended learning outcomes** | PLO 3: Able to express basic concepts of chemistry, chemical analysis, operation and maintenance of chemical instruments that can be applied in their work<br>Subject LO:<br>Students are able to determine the properties of elements based on periodic table elements<br>Students are able to determine molecular geometric shapes, able to describe the simple molecular orbital diagrams<br>Students are able to predict precipitation reactions<br>Students are describe the formation of coordination bonding<br>Students are determine the characteristics of solids | | | | |
| **Content** | 1. Elemental chemistry and periodic element<br>2. Molecular structure<br>3. Solubility equilibrium<br>4. Coordination chemistry<br>5. Solid chemistry | | | | |
| **Study and examination requirements and forms of examination** | Quizzes (30%), assignments (32%), Midterm exams (22%), final exams (16%) | | | | |
| **Media employed** | Google classroom, youtube, zoom meeting, google form, google doc | | | | |

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| **Reading list** | 1. Chang, R., 2003. Basic Chemistry: Nuclear Concept Volume:1. Erlangga: Jakarta<br>2. Chang, R., 2003. Basic Chemistry: Nuclear Concept Volume:2. Erlangga: Jakarta<br>3. Meisler, G.I., Tarr, D.A., 1991, Inorganic Chemistry, Prentice Hall, New Jersey<br>4. Saputro, A.N.C., 2015. Basic Concept of Coodination Chemistry. Deepublish: Yogyakarta |