

MODULE HANDBOOK

Modul Name	Bio-inorganic
Module Level	S1
Abbreviation, if applicable	3074112080
Sub-heading, if applicable	-
Course included in the module, if applicable	-
Semester/term	7/ fourth year
Modul coordinator(s)	Prof. Dr. Sari Edi Cahyaningrum, M.Si.
Lecturer(s)	Prof. Dr. Leny Yuanita, M.Kes; Prof.Dr. Sari Edi C, M.Si
Language	Bahasa Indonesia
Classification within the curriculum	Mt kuliah pilihan (elective)
Teaching format/class hours per week during the semester	2 hours lectures (50 min / hour)
Workload	2 hours lecture, 2 hours structured activities, 2 hours individual activities, 14 week a semester, and total 117 hours a semester~ 3.18 ECTS *
Credit point	2 CU (1.59 x 2 = 3.18 ECTS)
Requirement	Basic Inorganik Chemistry, Biochemistry
1 Learning Outcomes	<p>General Competence (knowledge):</p> <ol style="list-style-type: none"> 1. Able to apply logical, critical, systematic and innovative thinking in the development or implementation of science and technology to support mastery of Bioinorganic concepts and theories; 2. Make conclusions and analyze the behavioral phenomena of metallobiomolecular elements of groups, p groups and d groups and the role of these compounds in biological systems; 3. Have knowledge of the basics of bioinorganic, structure, function and behavior of metallobiomolecules of group elements, p groups and d groups and the role of these compounds in biological systems. 4. Have a caring and responsible attitude in studying bioinorganic <p>Spesific Competence :</p> <ol style="list-style-type: none"> 1. Be able to explain the function of Mg and Mn in photosynthesis

	<ol style="list-style-type: none"> 2. 2. Able to relate the properties and functions of dioxygen in biological systems 3. 3. Able to compare H,C,N,S,P transport in biological systems 4. 4. Able to interpret the function of alkaline and alkaline earth cations 5. 5. Able to compare the function of Fe in heme and non-heme compounds 6. 6. Able to explain the function of Co and Ni in biological systems 7. 7. Be able to explain the function of Cu and Zn in biological systems
Content	Functions of Mg and Mn in photosynthesis, properties and functions of dioxygen in biological systems; transport of H,C,N,S,P in biological systems; function of alkaline and alkaline earth cations, Fe in heme and non-heme compounds, Co, Ni, Cu and Zn in biological systems.
Atribut softskill	Have a caring and responsible attitude
Study/exam achievements	Students are considered to be competent and pass if at least get 55 Final score is calculated as follows: 20% assignment + 20% Quiz + 30%