MODULE HANDBOOK

Module Name	Material Chemistry
Module level	Bachelor
Abbreviation, if applicable	4720102108
Sub-heading, if applicable	-
Course included in the module, if applicable	-
Semester/term	6th semester
Module coordinator(s)	Dina Kartika Maharani, S.Si., M.Sc.
Lecturer(s)	Prof. Dr. Sari Edi Cahyaningrum, M.Si.; Dr. Amaria, M.Si.; Dina Kartika Maharani, S.Si., M.Sc.
Language	Indonesian
Classification within the curriculum	Elective Course
Teaching format/class hours per week during the semester:	2 hours lecturers (50 min per hours)
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 end-term exam). Thus, 1 CU equals to 39.67 workhours per semester. One CU equals to 1.587 ECTS.
Credit points:	2 CU x 1.587 = 3.174 ECTS
Prerequisites course(s):	Have taken Inorganic Chemistry III
Targeted learning outcomes:	CLO1 Able to apply logical, critical, systematic and innovative thinking in the development or implementation of science and technology to support mastery of concepts and theories of material chemistry CLO2 Make conclusions and analyze the results of the synthesis and characterization of alumina polyslica and chitosan-based biomaterials. CLO3 Have knowledge of the basic theories of synthesis and characterization of materials, bimaterials and advanced materials. CLO4 Have an honest and responsible attitude in synthesizing and characterizing the produced materials, biomaterials and advanced materials.
Content:	• Inorganic Polymer, • Homopolymer, • heteropolymer, • Alumina Polysilica Based Material, • silica, • Biomaterials (biomass, chitin chitosan, humic acid), • synthesis, • Materials Characterization, • Nanomaterials.

Study / exam achievements:	Students are considered to be competent and pass if at least get 55 Final score is calculated as follows: 20% participation + 30% assignment + 20% middle exam (UTS) & 30% final exam (UAS) Table index of graduation • A = 4 (85 ≤-≥ 100) • A- = 3,75 (80 ≤-< 85) • B+ = 3,5 (75 ≤- < 80) • B = 3 (70 ≤-< 75) • B- = 2,75 (65 ≤-<75) • C+ = 2,5 (60 ≤-<65) • C = 2 (55 ≤-<60) • D = 1 (40 ≤-<55) • E = 0 (0 ≤-<40)
Media:	Computer, LCD, White board
Learning Methods	Providing information, reviewing journals, group discussions and presentations.
Literature:	1. D.N. Hunter. 1990. Inorganic Polymer Black Well, Oxford University Science Book. 2. James E mark, Harry R Allcock.1994., Inorganic, Polymer Oxford University Science Book. 3. Mark T Weller.1995. Inorganic material Chemistry. Oxford University Science Book 4. Sari Edi Cahyaningrum, 2016, Chitosan Based Biomaterial 5. Inorganic Material Journals