KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET, DAN TEKNOLOGI
UNIVERSITAS NEGERI YOGYAKARTA
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
Kampus Karangmalang Yogyakarta 55281
Telepon (0274) 565411 Pesawat 217, (0274) 565411 (TU), fax. (0274) 548203
Laman : fmipa.uny.ac.id, E-mail : Surel_fmipa@uny.ac.id

KEPUTUSAN DEKAN FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
Nomor : B/123/UN.34.13/HK.03/2022

TENTANG

TUGAS MENGAJAR DAN MENGUJI DOSEN
SEMESTER GASAL TAHUN AKADEMIK 2022/2023

DEKAN FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

Menimbang : bahwa untuk pelaksanaan tugas pendidikan dan pengajaran pada semester Gasal tahun Akademik 2022/2023, perlu menetapkan Keputusan Dekan tentang **Tugas Mengajar dan Menguji Dosen Mata Kuliah** semester Gasal tahun Akademik 2022/2023;

Mengingat :

1. Undang–undang nomor 12 tahun 2012 tentang Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2012 Nomor 158, Tambahan Lembaran Negara Republik Indonesia Nomor 5336);
2. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Perguruan Tinggi (Lembaran Negara Republik Indonesia Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);
3. Peraturan Menteri Riset, Teknologi, dan Pendidikan Tinggi Nomor 35 Tahun 2017 tentang Statuta Universitas Negeri Yogyakarta;
4. Peraturan Menristek Dikti Nomor 2 Tahun 2019 tentang OTK Universitas Negeri Yogyakarta;
5. Keputusan Rektor Universitas Negeri Yogyakarta Nomor 1 Tahun 2019 tentang Peraturan Akademik Universitas Negeri Yogyakarta;
6. Keputusan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 5723/MPK/RHS/KP/2021 tentang Pengangkatan Rektor Universitas Negeri Yogyakarta Periode Tahun 2021-2025 ;
7. Keputusan Rektor Universitas Negeri Yogyakarta Nomor 1.27/UN34/IX/2019 tentang Pemberhentian dan Pengangkatan Dekan Fakultas di Universitas Negeri Yogyakarta;
8. SK Rektor Nomor 2.7/UN34/VIII/2020 Tanggal 7 Agustus 2020 tentang Pemindahan Program Magister dan Doktor Bidang Ilmu Monodisiplincr dari Pascasarjana ke Jurusan ke Fakultas Tahap Pertama;

M E M U T U S K A N :

Menetapkan : KEPUTUSAN DEKAN TENTANG TUGAS MENGAJAR DAN MENGUJI DOSEN SEMESTER GASAL TAHUN AKADEMIK 2022/2023

KESATU : Dosen yang namanya sebagaimana dimaksud dalam Lampiran merupakan dosen tetap Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Yogyakarta yang diserahi Tugas Mengajar dan Menguji pada Semester Gasal tahun Akademik 2022/2023;

KEDUA : Dosen yang namanya tersebut sebagaimana dimaksud dalam diktum kesatu mengampu dan menguji mata kuliah program studi masing-masing sebagaimana dimaksud dalam Lampiran;

KETIGA : Biaya yang diperlukan dengan adanya keputusan ini dibebankan pada anggaran DIPA – BLU Fakultas Matematika dan Ilmu Pengetahuan Alam Tahun 2022;

KEEMPAT : Keputusan ini berlaku pada tanggal 29 Agustus 2022 sampai dengan 31 Januari 2023

TEMBUSAN Keputusan Dekan ini disampaikan kepada :

1. Rektor UNY;
2. Kepala Biro UNY;
3. Para Wakil Dekan Di FMIPA UNY;
4. Para Koorprodi di FMIPA UNY
5. Koordinator Administrasi di FMIPA
6. Sekretaris Administrasi di FMIPA UNY;
7. Bendahara Gaji FMIPA UNY;
8. Kepala KPKN di Yogyakarta;
9. Yang bersangkutan untuk diketahui dan dilaksanakan;

Ditetapkan di Yogyakarta
Pada tanggal, 29 Agustus 2022
DEKAN FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

Prof. Dr. Ariswan, M.Si
NIP. 19590914 198803 1 003

Lampiran SK Dekan FMIPA UNY
Nomor : B/123/UN34.13/HK.03/2022
Tanggal : 29 Agustus 2022

DAFTAR TUGAS MENGAJAR DAN MENGUJI DOSEN
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM - UNIVERSITAS NEGERI YOGYAKARTA
SEMESTER GASAL TAHUN AKADEMIK 2022/2023

Nama : Prof. Dr. Hari Sutrisno, M.Si.
NIP : 196704071992031002
Pangkat : Pembina Utama Madya
Golongan : IV/d
Jabatan : Guru Besar
NPWP : 25.301.586.1-542.000

No	Kode MK	Mata Kuliah	SKS Matakuliah	Sem	Prodi	Rombel	Jenis	SKS Rombel	Beban Mengajar	Jumlah Peserta	Keterangan
1	KIM6223	Kristalokimia	2	5	KIMIA - S1	F	Teori	2	2,00	30	
2	KIM6223	Kristalokimia	2	5	KIMIA - S1	E	Teori	2	2,00	35	
3	KIM6223	Kristalokimia	2	5	KIMIA - S1	B	Teori	2	2,00	35	
4	MPK8206	Kimia Struktur Anorganik	2	1	PENDIDIKAN KIMIA - S2	Pend. Kimia B	Teori	2	2,00	23	
5	MPK8206	Kimia Struktur Anorganik	2	1	PENDIDIKAN KIMIA - S2	Pend. Kimia A	Teori	2	2,00	20	
6	MPK8218	Topik Spesial dalam Ilmu Kimia	2	1	PENDIDIKAN KIMIA - S2	Pend. Kimia S2 Pilihan	Teori	2	1,00	7	TIM
7	FMI8303	Metodologi Penelitian Pendidikan	3	1	PENDIDIKAN KIMIA - S2	Pend. Kimia A	Teori	3	1,50	19	TIM
8	MPK9210	Penulisan Proposal Disertasi	2	3	PENDIDIKAN KIMIA - S3	KIMIA S3 (Pend. Kimia)	Teori	2	1,00	1	TIM
								Jumlah Beban Mengajar	**13,50 SKS**		

Dekan,

Prof. Dr. Ariswan, M.Si.
NIP. 195909141988031003

UNIVERSITAS NEGERI YOGYAKARTA
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

DAFTAR HADIR KULIAH
SEMESTER TAHUN AJARAN 2022/2023

Program Studi : KIMIA - S1
Kelas : F
Jumlah Peserta : 30

Nama Dosen : Prof. Dr. Hari Sutrisno, M.Si.
Mata Kuliah : KIM6223 - Kristalokimia

No.	No. Mhs.	Nama Mahasiswa	Tanggal															Ket.
			31/08	07/09	14/09	21/09	28/09	05/10	12/10	19/10	26/10	02/11	09/11	16/11	23/11	30/11	07/12	14/12	
1	19307144012	Joanda Ario Yudha Mahendra	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
2	20307141064	Nabila Satyayana Parluhutan	H	H	H	H	TH	H	H	H	H	H	H	H	H	H	H	H	
3	20307141067	Christine Dian Prameswari	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
4	20307141069	Tria Novita Anasriah	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
5	20307141070	Rachmalia Muflichana Ifthin	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
6	20307141071	Nazifa Khuzaima	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
7	20307144001	Nuri Anggraini	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
8	20307144002	Zakia Wafiroh Handayani	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
9	20307144003	Ansya Pramesta Cahya	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
10	20307144004	Riri Fitria	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
11	20307144007	Tetra Devilia	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
12	20307144009	Firyal Nafara Subulana	H	H	H	H	H	H	TH	H	H	H	H	H	H	H	H	H	
13	20307144010	Husna Nur Sagita	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
14	20307144011	Herlina Putri Prastiwi	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
15	20307144012	Dwi Inayatul Hikma	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
16	20307144013	Silsa Aldrian Putri Kusuma	H	TH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
17	20307144014	Citra Dewi Kusuma Atmaja	H	H	H	H	H	H	H	H	H	H	H	H	H	TH	H	H	
18	20307144015	Diva Salsabila	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
19	20307144016	Sekar Paramitha Rizqy Dianti	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
20	20307144017	Sabira Nurul Azeeza	H	H	H	H	H	H	H	H	H	H	H	H	H	TH	H	H	
Jumlah Mahasiswa yang hadir			**30**	**28**	**29**	**29**	**28**	**30**	**28**	**30**	**30**	**30**	**30**	**30**	**30**	**27**	**30**	**30**	
Tanda tangan (paraf) dosen pengajar																			

UNIVERSITAS NEGERI YOGYAKARTA
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

DAFTAR HADIR KULIAH
SEMESTER TAHUN AJARAN 2022/2023

Program Studi : KIMIA - S1
Kelas : F
Jumlah Peserta : 30
Nama Dosen : Prof. Dr. Hari Sutrisno, M.Si.
Mata Kuliah : KIM6223 - Kristalokimia

No.	No. Mhs.	Nama Mahasiswa	Tanggal															Ket.
			31/08	07/09	14/09	21/09	28/09	05/10	12/10	19/10	26/10	02/11	09/11	16/11	23/11	30/11	07/12	14/12	
21	20307144018	Cutita Sari Khairunnisa	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
22	20307144019	Hesti Fatmawati	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
23	20307144020	Sahda Khairun Nisa	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
24	20307144021	Kusuma Devi Safitri	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
25	20307144022	Yulisa Alfi Maharani	H	TH	M	M	M	H	M	H	H	H	H	H	H	M	H	H	
26	20307144026	Lusiana Qotimatul Izah	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
27	20307144027	Dayu Arinda	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
28	20307144035	Adilah Bilqis	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
29	20307144036	Fitra Asyifa Azra	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
30	20307144038	B. Narayani	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
Jumlah Mahasiswa yang hadir			**30**	**28**	**29**	**29**	**28**	**30**	**28**	**30**	**30**	**30**	**30**	**30**	**30**	**27**	**30**	**30**	
Tanda tangan (paraf) dosen pengajar																			

UNIVERSITAS NEGERI YOGYAKARTA
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

MONITORING KEGIATAN MENGAJAR DOSEN
SEMESTER TAHUN AJARAN 2022/2023
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM UNY

Program Studi : KIMIA - S1
Kelas : F
Nama Dosen : Prof. Dr. Hari Sutrisno, M.Si.
Mata Kuliah : KIM6223 - Kristalokimia

No.	Pertemuan Ke	Hari/Tanggal	Materi Yang diajarkan	Jam		Jml Mhsw	Paraf Dosen	Paraf Mhsw	Keterangan
				Masuk	Keluar				
1	1	Rabu, 31 Agustus 2022	Pendahuluan	09:20:00	11:00:00	30			
2	2	Rabu, 7 September 2022	Metode Sintesis Kristal	09:20:00	11:00:00	28			
3	3	Rabu, 14 September 2022	Unsur dan Operasi Simetri	09:20:00	11:00:00	29			
4	4	Rabu, 21 September 2022	Penentuan Grup titik molekul	09:20:00	11:00:00	29			
5	5	Rabu, 28 September 2022	Unsur dan Simretri Kristal	09:20:00	11:00:00	28			
6	6	Rabu, 5 Oktober 2022	Grup Kristalin	09:20:00	11:00:00	30			
7	7	Rabu, 12 Oktober 2022	Penentuan Sistem dan Grup Kristal	09:20:00	11:00:00	28			
8	8	Rabu, 19 Oktober 2022	UAS	09:20:00	11:00:00	30			
9	9	Rabu, 26 Oktober 2022	Sumber Sinar-X	09:20:00	11:00:00	30			
10	10	Rabu, 2 Nopember 2022	Kristal Sederhana	09:20:00	11:00:00	30			
11	11	Rabu, 9 Nopember 2022	Penentuan Bidang Kristal Kubik	09:20:00	11:00:00	30			
12	12	Rabu, 16 Nopember 2022	Analsis XRD -Trial & error	09:20:00	11:00:00	30			
13	13	Rabu, 23 Nopember 2022	Analisis XRD - Analitik	09:20:00	11:00:00	30			
14	14	Rabu, 30 Nopember 2022	Kristal Kompleks	09:20:00	11:00:00	27			
15	15	Rabu, 7 Desember 2022	Penentuan dan Penggambaran Kristal	09:20:00	11:00:00	30			
16	16	Rabu, 14 Desember 2022	UAS	09:20:00	11:00:00	30			

Yogyakarta, ...
Mengetahui,
Ketua Jurusan

(.....)

FORM PENILAIAN
KELAS Non Reguler
SEMESTER Genap TAHUN 2022

PROGRAM STUDI : KIMIA - S1
PENGAMPU : Prof. Dr. Hari Sutrisno M.Si.
JUMLAH PESERTA : 30
KELAS : F

NO	NIM	NAMA	NILAI [HURUF]
1	19307144012	Joanda Ario Yudha Mahendra	B-
2	20307141064	Nabila Satyayana Parluhutan	B-
3	20307141067	Christine Dian Prameswari	A-
4	20307141069	Tria Novita Anasriah	B-
5	20307141070	Rachmalia Muflichana Ifthin	B-
6	20307141071	Nazifa Khuzaima	B-
7	20307144001	Nuri Anggraini	C+
8	20307144002	Zakia Wafiroh Handayani	B-
9	20307144003	Ansya Pramesta Cahya	B-
10	20307144004	Riri Fitria	B-
11	20307144007	Tetra Devilia	B-
12	20307144009	Firyal Nafara Subulana	B-
13	20307144010	Husna Nur Sagita	B-
14	20307144011	Herlina Putri Prastiwi	B
15	20307144012	Dwi Inayatul Hikma	B-
16	20307144013	Silsa Aldrian Putri Kusuma	B-
17	20307144014	Citra Dewi Kusuma Atmaja	B-
18	20307144015	Diva Salsabila	B
19	20307144016	Sekar Paramitha Rizqy Dianti	B-
20	20307144017	Sabira Nurul Azeeza	B
21	20307144018	Cutita Sari Khairunnisa	B-
22	20307144019	Hesti Fatmawati	C+
23	20307144020	Sahda Khairun Nisa	B+
24	20307144021	Kusuma Devi Safitri	B-
25	20307144022	Yulisa Alfi Maharani	E
26	20307144026	Lusiana Qotimatul Izah	B
27	20307144027	Dayu Arinda	B+
28	20307144035	Adilah Bilqis	B-
29	20307144036	Fitra Asyifa Azra	B-
30	20307144038	B. Narayani	B-

Rekap Nilai : A = ... , B = ... , C = ... , D = ... , E/K = ...

Yogyakarta , ...
Dosen/Koord. Team Penguji :

(.....)

	UNIVERSITAS NEGERI YOGYAKARTA **FACULTY MATHEMATICS AND NATURALE SCIENCE** **BACHELOR OF EDUCATION IN CHEMISTRY**

SEMESTER LEARNING PLAN (SLP)

COURSE	**CODE**	**COURSE GROUP**	**CREDIT UNIT (sks)**	**SEM.**	**DEVELOPMENT DATE**
Crystallochemistry	KIM 6210	Course in Bachelor of Education in Chemistry	2	6	May 29, 2020

	Course Lecturer	**Head of Study Program**
Authorization	Prof. Dr. Hari Sutrisno, M.Si.	Dr. Retno Arioningrum, M.Si

		Learning Outcomes (LO) – Study Program
Program Learning Outcomes (PLO)	**Attitude and Value**	PLO1. Demonstrate religious attitudes and human values
	Work Ability	PLO2. Able to follow the development of science and technology as a supporter of lifelong learning
	Knowledge Assignment	PLO3. Having an independent attitude, being able to adapt and be responsible for completing tasks PLO4. Communicate ideas or ideas verbally or in writing

	Authority and Responsibility	PLO5. Having the ability to innovate in chemical research techniques
	CLO - Course Outcames	
Course Outcames	CLO1	Demonstrate an awareness of responsible and ethical conducts as well integrity in the context of their profession and obligations to society
	CLO2	Demonstrate knowledge of advanced theories and methods of chemistry
	CLO3	Demonstrate proficiency in analyzing, applying, and solving engineering problems using the acquired chemical methods.
	CLO4	Demonstrate the problem solving ability in understand, extract and analyze engineering problems and reorganize the knowledge in chemistry forms for specific purposes
	CLO5	Ability to convey ideas on chelistry knowledge clearly and effectively in both written and spoken forms. In addition, ability to work collaboratively as part of a team undertaking a range of different team roles
	CLO6	Demonstrate the awareness of contemporary issues in Inorganic chemistry and the ability to respond the challenges
	CLO7	Ability to pursue independent study and demonstrate the awareness for lifelong learning and professional development
Short description of the course	Crystalochemistry courses are courses for students of Bachelor of Education in Chemistry with descriptions including: chemical structure description, symmetry and molecular groups, chemical bonds and lattice energy, molecular structures 1(compounds of the main group elements) and 2 (transition metal compounds), crystal gratings, symmetry and groups crystals, X-ray diffraction instruments and determination of simple crystal structures. This course aims to enable students to understand the structure and grid contained in molecular compounds 1 and 2.	
Learning Materials / Subjects	Subjects include: 1. Description of chemical structure 2. Theory of repulsion of valence electron pairs	

<table>
<tr><td></td><td colspan="2">3. Symmetry and molecular groups
4. Chemical bonds and lattice energy
5. Atom size size
6. Symmetry and crystal groups
7. Molecular structure 1: compounds of the main group elements
8. Molecular structure 2: transition metal compounds
9. Structure of nonmetal elements
10. X-ray diffractometer
11. Determination of simple crystal structure</td></tr>
<tr><td rowspan="4">References</td><td colspan="2">Primary</td></tr>
<tr><td colspan="2">P1. Muller, U., (2006). Inorganic Structural Chemistry, second edition. West Sussex: John Wiley & Sons Ltd
P2. Huheey, J. E., Keiter, E. A. & Keiter, R. L. (1993). Inorganic Chemistry: Principle of Structure and Reactivity. New York : Harper Collins College Publisher.
P3. Li, W. K., Zhou, G. D. & Wai Mak, T. C. (2008). Advanced Structural Inorganic Chemistry. New York: Oxford Science Publication
P4. Miessler, G. L. & Tarr, D. A. (2009). Inorganic Chemistry, third edition. New Delhi: Pearson Education .</td></tr>
<tr><td colspan="2">Support</td></tr>
<tr><td colspan="2">S1. West, A. R. (1989). Solid State Chemistry and Its Applications. Singapore: John Wiley & Sons Ltd.
S2. Journal Inorganic Chemistry</td></tr>
<tr><td rowspan="2">Instructional Media</td><td>Software</td><td>Hardware</td></tr>
<tr><td>File dan Powerpoint</td><td>Laptop
Board and stationery
Projector</td></tr>
<tr><td>Team-Teaching</td><td colspan="2">-</td></tr>
<tr><td>Prerequisite Course</td><td colspan="2">-</td></tr>
</table>

LEARNING ACTIVITIES

week	Sub-CLO	Indicator	Criteria & Form of Assessment	Learning Method (Estimated Time)	Learning Materials (Library)	Quality of Assessment (%)
1	Describe chemical structure and symmetry	1. Students can describe chemical structures 2. Students are able to explain the symmetry of a chemical compound	Assessment Criteria: logic and meaningfulness Form of assessment: Observation with the class Observation rubric	*Direct Instruction* 2 x 50 minute	P1, P2, P3	2%
2-3	Analyze polymorphism and the phase of transition from chemical compounds	Students are able to analyze the polymorphism and transition phase of various chemical compounds	Assessment Criteria: logic and meaningfulness Form of assessment: Observation with the class Observation rubric	*Direct Instruction* 4 x 50 minute	P1, P2	2%
4-5	Analyzing chemical bonds and lattice energy contained in chemical compounds	Students are able to analyze chemical bonds and lattice energy that occur in various chemical compounds	Assessment Criteria: logic and meaningfulness Form of assessment: Observation with the class Observation rubric	*Direct Instruction* 2 x 50 minute	P1, P4	2%

6-7	Explain atomic size effects	1. Students are able to explain the definition of atomic size effects 2. Students can explain the factors that influence the size effect of an atom	Assessment Criteria: logic and meaningfulness Form of assessment: Observation with the class Observation rubric	*Direct Instruction* 2 x 50 minute	P1, P3, P4	2%
8	**Midterm Exam**					**40%**
9-10	Analyze the molecular structure in group 1: compounds of the main group elements	Students are able to analyze group theory contained in the compounds of the main group elements	Assessment Criteria: logic and meaningfulness Form of assessment: Observation with the class Observation rubric	Direct Instruction Individual task 6 x 50 minute	P1, P2, P3	2%
11-12	Analyzing the molecular structure of group 2: transition metal compounds	Students are able to analyze group theory contained in the compounds of the main group elements	Assessment Criteria: logic and meaningfulness Form of assessment: Observation with the class Observation rubric	Direct Instruction Individual task 4 x 50 minute	P1, P3	2%
13	Analyze the structure of nonmetal elements	1. Students are able to analyze chemical structures not metals 2. Students are able to analyze group theory and lattice found in non-metal compounds	Assessment Criteria: logic and meaningfulness Form of assessment: Observation with the class Observation rubric	Direct Instruction Individual task 4x 50 minute	P1, P3, S1	4%

14-15	Analyze structures like diamonds	1. Students are able to analyze chemical structures not metals 2. Students are able to analyze group theory and lattice found in non-metal compounds	Assessment Criteria: logic and meaningfulness Form of assessment: Observation with the class Observation rubric	Direct Instruction Individual task 4 x 50 minute	P1, S1	4%
16	**Final Exams**					**40%**

ASSESSMENT WEIGHT

No	CLO	Object of assessment	Valuation Techniques	Quality
1	CLO 3	The independent task of writing and / or listening skills	Assignment	15%
2	CLO 5 dan 7	Structured tasks are reading and / or writing skills	Assignment	15%
3	CLO 3, 4	Speaking ability and presentation skills journal analysis (Skills)	Speaking ability	10%
4	CLO 1 dan 2	Attitude and Value	Observation of Attitude	10%
5	CLO 3, 5 dan 6	Midterm Exam	Written Test	25%
6	CLO 3; 6; dan 7.1	Final Exam	Written Test	25%
Jumlah				**100%**

PLO AND CLO MAPPING

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
CLO1	√				
CLO2		√			
CLO3			√		
CLO4			√		
CLO5		√			√
CLO6				√	√
CLO7				√	

Knowing,
Head of Study Program

Dr. Retno Arianingrum, M.Si
NIP

Yogyakarta, April 18, 2020
Course Lecturer

Prof. Dr. Hari Sutrisno, M.Si
NIP 196704071992031002

ANALYSIS OF ACHIEVEMENT CLO / PLO

Study Program : Bachelor of Education in Chemistry
Course : Crystallochemistry **Code:** MKA6210 Credit Unit (sks) **:** 2 (Teory)
Semester : 6
Prerequisite Course : -
Course Lecturer : Prof. Dr. Hari Sutrisno, M.Si

A. TABLE OF OF ACHIEVEMENT CLO

Task/ Exam	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5	CLO 6	CLO 7
Structured Tasks 1					78	75	
Structured Tasks 2				84			85
Independent task 1							
Independent task 2							
Keterampilan			80				
Sikap	85	86					
Midterm Exam				72			
Final Exam				78			
AVERAGE	85	86	80	76	74,5	71	82

B. TABLE OF OF ACHIEVEMENT PLO

	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5	CLO 6	CLO 7	AVERAGE
PLO 1	85							**85**
PLO 2		86						**86**
PLO 3			80	76				**78**

PLO 4						74		**74**
PLO 5							**76**	**76**
PLO 6					74,5			**74,5**
AVERAGE								**78.9**