



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/12.1/UN.34.13/HK.03/2024

TENTANG  
**TUGAS MENGAJAR DAN MENGUJI DOSEN**  
SEMESTER GENAP TAHUN AKADEMIK 2023/2024

DEKAN FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

Menimbang : bahwa untuk pelaksanaan tugas pendidikan dan pengajaran pada semester Genap Tahun Akademik 2023/2024, perlu menetapkan Keputusan Dekan tentang **Tugas Mengajar dan Menguji Dosen Mata Kuliah** semester Genap Tahun Akademik 2023/2024;

Mengingat :

1. Undang-undang Nomor 1 Tahun 2004 tentang Perbendaharaan Negara (Lembaran Negara Republik Indonesia Tahun 2004 Nomor 5, Tambahan Lembaran Negara Republik Indonesia Nomor 4355);
2. Undang-undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2012 Nomor 158, Tambahan Lembaran Negara Republik Indonesia Nomor 5336);
3. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Perguruan Tinggi (Lembaran Negara Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);
4. Peraturan Pemerintah Nomor 35 Tahun 2022 tentang Perguruan Tinggi Badan Hukum Universitas Negeri Yogyakarta (Lembaran Negara Republik Indonesia Tahun 2022 Nomor 207, Tambahan Lembaran Negara Republik Indonesia Nomor 6823);
5. Keputusan Menteri Pendidikan dan Kebudayaan Nomor 6723/MPK/RHS/KP/2021 tentang Pengangkatan Rektor Universitas Negeri Yogyakarta Periode Tahun 2021-2025 ;
6. Peraturan Rektor Universitas Negeri Yogyakarta Nomor 15 Tahun 2022 tentang Organisasi dan Tata Kerja Universitas Negeri Yogyakarta ;

MEMUTUSKAN :

Menetapkan : KEPUTUSAN DEKAN TENTANG TUGAS MENGAJAR DAN MENGUJI DOSEN SEMESTER GENAP TAHUN AKADEMIK 2023/2024

KESATU : Dosen yang namanya sebagaimana dimaksud dalam Lampiran merupakan dosen tetap Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Yogyakarta yang disertai Tugas Mengajar dan Menguji pada Semester Genap Tahun Akademik 2023/2024;

- 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 RKA-UKPK UNY Tahun 2024;
- KEEMPAT : Keputusan Rektor ini berlaku pada tanggal 12 Februari 2024 sampai dengan 12 Juli 2024;

TEMBUSAN Keputusan Dekan ini disampaikan kepada :

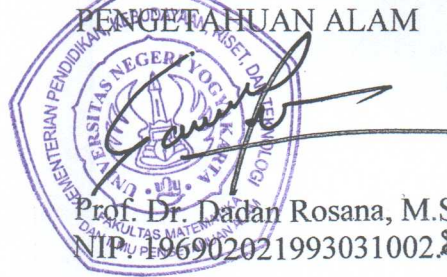
1. Rektor UNY;
2. Para Wakil Dekan di FMIPA UNY;
3. Para Koorprodi di FMIPA UNY;
4. Kepala Layanan Administrasi di FMIPA;
5. Sekretaris Layanan Administrasi di FMIPA UNY;
6. Bendahara Gaji FMIPA UNY;
7. Yang bersangkutan untuk diketahui dan dilaksanakan;

Ditetapkan di Yogyakarta

Pada tanggal, 12 Februari 2024

DEKAN FAKULTAS MATEMATIKA DAN ILMU

PENGETAHUAN ALAM



Prof. Dr. Dadan Rosana, M.Si

NIP. 196902021993031002

Lampiran SK Dekan FMIPA UNY

Nomor : B/12.1/UN.34.13/HK.03/2024

Tanggal : 12 Februari 2024

**DAFTAR TUGAS MENGAJAR DAN MENGUJI DOSEN**  
**FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM - UNIVERSITAS NEGERI YOGYAKARTA**  
**SEMESTER GENAP TAHUN AKADEMIK 2023 / 2024**

Nama : Prof. Dr. Hari Sutrisno M.Si.

NIP : 196704071992031002

No	Kode MK	Mata Kuliah	SKS Matakuliah	Semester	Prodi	Rombel	Jenis	SKS Rombel	Beban Mengajar	Jumlah Peserta	Keterangan
1	FMI8303	Metodologi Penelitian Pendidikan	3	1	PENDIDIKAN KIMIA - S2	S2D	Teori	3	1.50	16	
2	FMI8303	Metodologi Penelitian Pendidikan	3	1	PENDIDIKAN KIMIA - S2	S2_C	Teori	3	1.50	16	
3	MPK6344	Kimia Anorganik Non Logam	3	2	PEND. KIMIA - S1	C	Teori	2	1.00	39	
4	MPK6344	Kimia Anorganik Non Logam	3	2	PEND. KIMIA - S1	A1	Praktek	1	1.00	22	
5	MPK6344	Kimia Anorganik Non Logam	3	2	PEND. KIMIA - S1	A	Teori	2	2.00	44	
6	MPK8206	Kimia Struktur Anorganik	2	1	PENDIDIKAN KIMIA - S2	S2D	Teori	2	2.00	16	
7	MPK8206	Kimia Struktur Anorganik	2	1	PENDIDIKAN KIMIA - S2	S2_C	Teori	2	2.00	16	
8	MPK9208	Topik Khusus dalam Kimia Anorganik dan Kimia Fisik	2	1	PENDIDIKAN KIMIA - S3	S3_PK	Teori	2	1.00	2	
9	MPK9214	Disain dan Analisis Data Penelitian Pendidikan Kimia	2	2	PENDIDIKAN KIMIA - S3	S3_PK	Teori	2	2.00	3	
10	MPK9313	Penulisan Artikel Jurnal	3	3	PENDIDIKAN KIMIA - S3	S3_PK	Teori	3	0.75	2	
11	MPK9323	Metodologi Penelitian Pendidikan Kimia	3	1	PENDIDIKAN KIMIA - S3	S3_PK	Teori	3	3.00	2	

Jumlah Beban Mengajar

17.75 SKS



Dekan  
 Prof. Dr. Dadan Rosana M.Si.  
 NIP. 196902021993031002



**MINISTRY OF RESEARCH, TECHNOLOGY, AND HIGHER EDUCATION**  
**UNIVERSITAS NEGERI YOGYAKARTA**  
 FACULTY MATHEMATICS AND NATURALE SCIENCE  
 MASTER OF EDUCATION IN CHEMISTRY  
**Colombo Street, No. 1, Karangmalang Campus, Yogyakarta 55281**  
 Tel. +62274-550836 (front office), Fax. +62274-520326  
 Email: [pps@uny.ac.id](mailto:pps@uny.ac.id), [humas\\_pps@uny.ac.id](mailto:humas_pps@uny.ac.id)

**MODUL HANDBOOK**

COURSE	CODE	COURSE GROUP	CREDIT UNIT	SEM.	DEVELOPMENT DATE
Inorganic Structural Chemistry	MPK8206	Master of Education in Chemistry	2	1	Jan 2, 2019
Authorization	<b>Course Lecturer</b> Prof. Dr. Hari Sutrisno, M.Si.			<b>Head of Study Program</b> Prof. Dr. Hari Sutrisno, M.Si.	
<b>Programme Learning Outcomes (PLO) – Study Program</b>					
<b>Learning Outcomes</b>	<b>Attitude and Value</b>	PLO1. Enabling to cooperate and having good morals, ethics and personality in completing their duties, social sensitivity and high concern for the community and its environment. PLO2. Respect to the diversity of cultures, views, beliefs, and religions as well as other people's original opinions/ findings and love the country and support world peace as citizens PLO3. Upholding the rule of law and having the spirit to prioritize the interests of the nation and the wider community. PLO4. Enabling to internalize the entrepreneurial spirit, academic values and norms that are properly related to honesty, ethics, attribution, copyright, confidentiality and ownership of data			
	<b>Work Ability</b>	PLO5. Implementing and developing knowledge and technology in the field of chemistry education through reasoning and scientific research based on logical, critical, systematic, and creative thinking. PLO6. Developing chemistry education through scientific research, or producing scientific works along with study concepts based on scientific rules arranged in the form of a thesis. PLO7. Publishing the results of research in the field of chemistry education in scientific journals nationally and internationally accredited. PLO8. Increasing the capacity of independent learning. PLO9. Having structured learning skills for self-development, science, and career sustainability. PLO10. Enabling to think critically, make informed decisions, and communicate effectively, academically, and ethically.			

	<b>Knowledge Assignment</b>	<p>PLO11. Documenting, storing, auditing, securing, and rediscovering research data for further research purposes.</p> <p>PLO12. Identifying the scientific field of the research object and positioning it into a research map.</p> <p>PLO13. Carrying out chemistry education research based on research maps, with an inter- or multi- disciplinary approach, independently or in collaboration with other institutions.</p>
	<b>Authority and Responsibility</b>	<p>PLO14. Developing and maintaining networks with colleagues, including in the broader research institutions and communities.</p> <p>PLO15. Arranging and communicating ideas and arguments that can be scientifically accountable and academic ethics, through various forms of media to the community, especially the academic community.</p>
	<b>Course Outcomes</b>	
<b>Course Outcomes</b>	CO1	Demonstrate an awareness of responsible and ethical conducts as well integrity in the context of their profession and obligations to society
	CO2	Demonstrate knowledge of advanced theories and methods of chemistry
	CO3	Demonstrate proficiency in analyzing, applying, and solving engineering problems using the acquired chemical methods.
	CO4	Demonstrate the problem-solving ability in understand, extract and analyze engineering problems and reorganize the knowledge in chemistry forms for specific purposes
	CO5	Ability to convey ideas on chemistry 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
	CO6	Demonstrate the awareness of contemporary issues in Inorganic chemistry and the ability to respond the Challenges
	CO7	Ability to pursue independent study and demonstrate the awareness for lifelong learning and professional development
<b>Short Description of Course</b>	<p>Inorganic Structurale Chemistry courses are courses for students of Master 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.</p>	

<b>Learning Materials / Subjects</b>	Subjects include: <ol style="list-style-type: none"> <li>1. Description of chemical structure</li> <li>2. Theory of repulsion of valence electron pairs</li> <li>3. Symmetry and molecular groups</li> <li>4. Chemical bonds and lattice energy</li> <li>5. Symmetry and crystal groups</li> <li>6. Molecular structure 1: compounds of the main group elements</li> <li>7. Molecular structure 2: transition metal compounds</li> <li>8. Structure of nonmetal elements</li> <li>9. X-ray diffractometer</li> <li>10. Determination of simple crystal structure</li> </ol>	
<b>References</b>	<b>Primary</b>	
	<p>Atkins, P., Overton, T., Rourke, J., Weller, M. &amp; Armstrong, F. (2010). <i>Shriver and Atkins' Inorganic Chemistry, 5th Edition</i> Great Britain : Oxford University Press</p> <p>Huheey, J. E., Keiter, E. A. &amp; Keiter, R. L. (1993). <i>Inorganic Chemistry: Principle of Structure and Reactivity</i>. New York : Harper Collins College Publisher.</p> <p>Li, W. K., Cheung, Y. S., Mak, K. K. W. &amp; Mak, T. C. W. (2013). <i>Problems In Structural Inorganic Chemistry</i>. Hong Kong: Oxford Press</p> <p>Li, W. K., Zhou, G. D. &amp; Wai Mak, T. C. (2008). <i>Advanced Structural Inorganic Chemistry</i>. New York: Oxford Science Publication</p> <p>Miessler, G. L. &amp; Tarr, D. A. (2009). <i>Inorganic Chemistry, third edition</i>. New Delhi: Pearson Education</p> <p>Muller, U., (2006). <i>Inorganic Structural Chemistry, second edition</i>. West Sussex: John Wiley &amp; Sons Ltd</p> <p>Pfennig, B.W. (2015). <i>Principles of inorganic chemistry</i>. New Jersey: John Wiley &amp; Sons, Inc.</p> <p>Strohfeltd, K. (2015). <i>Essentials of Inorganic Chemistry</i>. John Wiley &amp; Sons</p>	
	<b>Support</b>	
	<p>S1. West, A. R. (2014). <i>Solid State Chemistry and Its Applications. second edition</i>. Singapore: John Wiley &amp; Sons Ltd.</p> <p>S2. Journal Inorganic Chemistry</p>	
<b>Instructional Media</b>	<b>Software</b> File dan Powerpoint	<b>Hardware</b> Laptop, Board and stationery Projector
<b>Team-Teaching</b>	<ul style="list-style-type: none"> <li>- Prof. Dr. Hari Sutrisno</li> <li>- Dr. Dyah Purwaningsih</li> </ul>	
<b>Prerequisite Course</b>	-	

## ASSESSMENT WEIGHT

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

## PLO AND CO MAPPING

		Learning Outcomes (PLO)														
		Attitude and Value				Work Ability						Knowledge Assignment			Authority and Responsibility	
		PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12	PLO13	PLO14	PLO15
<b>Course : KIM8207 - Inorganic Structural Chemistry</b>																
<b>Course Outcomes</b>	CO1	√		√	√											
	CO2					√	√									
	CO3		√							√						
	CO4				√						√			√		
	CO5		√					√			√		√			
	CO6							√			√		√			
	CO7											√				√

Head of Study Program

Prof. Dr. Eli Roaheti, M.Si

Yogyakarta, August 29, 2022  
Lecturer

Prof. Dr. Hari Sutrisno, M.Si



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI  
UNIVERSITAS NEGERI YOGYAKARTA  
FAKULTAS : FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM  
PROGRAM STUDI : PENDIDIKAN KIMIA - S2

**DAFTAR HADIR KULIAH**  
**TAHUN AKADEMIK : 2023/2024**  
**SEMESTER : GENAP**

KODE MATA KULIAH : MPK8206  
MATA KULIAH : KIMIA STRUKTUR ANORGANIK  
KELAS : S2\_C  
PENGAMPU : Prof. Dr. Hari Sutrisno M.Si.  
HARI, JAM : Kamis , 15:40:00 s.d 17:20:00  
RUANG : R. Kuliah Lt. 1 .05, Gedung Kuliah D.02, size:45  
: [D.02.1.01.05]





UNIVERSITAS NEGERI YOGYAKARTA  
FAKULTAS MATEMATIKA DAN ILMU  
PENGETAHUAN ALAM

DAFTAR HADIR KULIAH  
SEMESTER GENAP TAHUN AJARAN 2023/2024

Program Studi : PENDIDIKAN KIMIA - S2  
Kelas : S2\_C

Nama Dosen : Prof. Dr. Hari Sutrisno M.Si.  
Mata Kuliah : MPK8206 - Kimia Struktur Anorganik

No.	No. Mhs.	Nama Mahasiswa	Tanggal																Ket.
			15/02	22/02	29/02	07/03	14/03	28/03	04/04	18/04	25/04	02/05	16/05	30/05	03/06	05/06	10/06	13/06	
1	23031540031	HENI KARTIKA INDRIYANI	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
2	23031540032	WIQY MUFARRIHATURRAHMA MUSTAQIMAL HIKAM	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
3	23031540033	RAFIKA SARAH AULIA	H	H	H	H	H	H	H	H	H	H	TH	H	H	H	H	H	
4	23031540034	AGNESIA NINA UTAMI	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
5	23031540035	DINA DANIA NAVIETA	H	H	H	H	H	H	H	TH	H	H	H	H	H	H	H	H	
6	23031540037	VIVI DWI ANTIKA	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
7	23031540038	RADEN RARA TASYA NOOR NABILA	H	H	H	H	H	TH	H	H	H	TH	H	H	H	H	H	H	
8	23031540039	AYU TAQWANTARI DINA ASTUTI	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
9	23031540040	SISKA WIDIANA PUTRI	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
10	23031540041	RESTYANI RAMADANTY	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
11	23031540042	AFID RAMADHANI	H	H	H	TH	H	H	H	H	H	H	H	H	H	H	H	H	
12	23031540045	KHAIRANI NOVIA	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
13	23031540046	ELFRIDA DAIMAN	H	H	TH	H	H	H	H	H	H	H	H	H	H	H	H	H	
14	23031540052	SHAZIA ASLAM	H	H	TH	H	H	H	H	H	TH	H	H	H	H	H	H	H	
15	23031540053	SALMAN ALI	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
16	23031540065	MUHAMMAD HIKAM		TH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	

No.	No. Mhs.	Nama Mahasiswa	Tanggal															Ket.	
			15/02	22/02	29/02	07/03	14/03	28/03	04/04	18/04	25/04	02/05	16/05	30/05	03/06	05/06	10/06		13/06
Jumlah Mahasiswa yang hadir			15	15	14	15	16	15	16	15	15	15	15	16	16	16	16	16	
Tanda tangan (paraf) dosen pengajar																			



UNIVERSITAS NEGERI YOGYAKARTA  
**FAKULTAS MATEMATIKA DAN ILMU  
 PENGETAHUAN ALAM**

**MONITORING KEGIATAN MENGAJAR DOSEN  
 SEMESTER GENAP TAHUN AJARAN 2023/2024  
 FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM UNY**

Program Studi : PENDIDIKAN KIMIA - S2  
 Kelas : S2\_C  
 Nama Dosen : Prof. Dr. Hari Sutrisno M.Si.  
 Mata Kuliah : MPK8206 - Kimia Struktur Anorganik

Pertemuan Ke	Hari/Tanggal	Materi Yang diajarkan	Jam		Jml Mhsw	Paraf Dosen	Paraf Mhsw	Keterangan
			Masuk	Keluar				
1	Kamis, 15 Februari 2024	PENDAHULUAN	15:40:00	17:20:00	15			
2	Kamis, 22 Februari 2024	Struktur Nyata	15:40:00	17:20:00	16			
3	Kamis, 29 Februari 2024	Geometri Molekul NYATA	15:40:00	17:20:00	16			
4	Kamis, 07 Maret 2024	Simetri dan Goup Molekul	15:40:00	17:20:00	16			
5	Kamis, 14 Maret 2024	Penentuan Grup Molekul	14:00:00	15:20:00	16			
6	Kamis, 28 Maret 2024	Simetri dan Group KRISTAL	14:00:00	15:20:00	16			
7	Kamis, 04 April 2024	grup kristalin	14:00:00	15:50:00	16			
8	Kamis, 18 April 2024	Grup Kristalin Lanjutan	15:37:00	17:20:00	16			
9	Kamis, 25 April 2024	Grup Kristalin Lanjut	15:40:00	17:20:00	16			
10	Kamis, 02 Mei 2024	Latihan Mandiri	15:40:00	17:20:00	16			
11	Kamis, 16 Mei 2024	UTS	15:40:00	17:20:00	16			
12	Kamis, 30 Mei 2024	Difraksi Sinar-x	15:40:00	17:20:00	16			
13	Senin, 03 Juni 2024	Penentuan Bidang kristal dan parameter Kisi	07:30:00	09:20:00	16			
14	Rabu, 05 Juni 2024	Latihan Penentuan Struktur Kristal	09:00:00	10:50:00	16			
15	Senin, 10 Juni 2024	LATIHAN	13:00:00	14:30:00	16			
16	Kamis, 13 Juni 2024	UAS	09:00:00	11:30:00	16			

Yogyakarta, .....

Mengetahui,  
Ketua Jurusan

(.....)