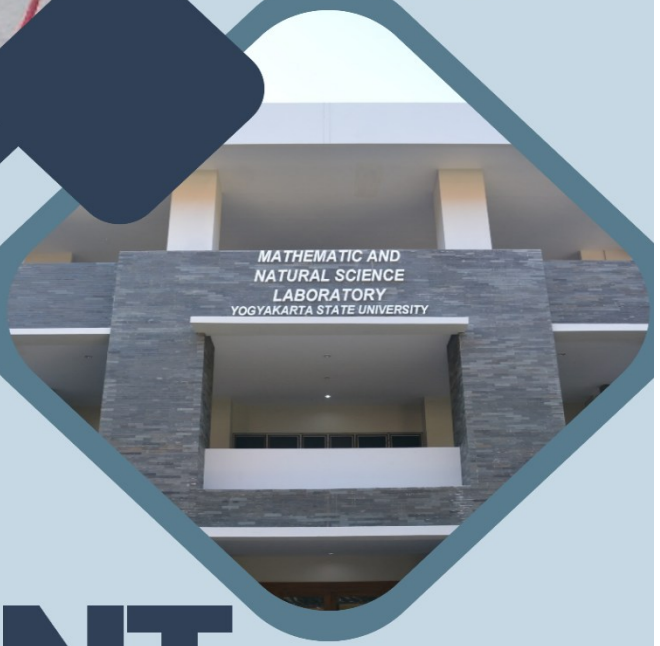


STUDENT HANDBOOK

CHEMISTRY STUDY PROGRAM

DEPARTMENT CHEMISTRY EDUCATION
FACULTY OF MATHEMATICS AND NATURAL SCIENCE
YOGYAKARTA STATE UNIVERSITY

s1kimia@uny.ac.id

https://kimia.fmipa.uny.ac.id/

UNY VISION

To become a superior, creative and innovative educational university based on piety,independence and intelligence in 2025

UNY MISSION:

1. *Organizing superior, creative and innovative academic and professional education in the field of education to produce people who are devout, independent and intelligent.*
2. *Organizing superior, creative and innovative academic, professional and vocational education in non-educational fields to produce people who are devout, independent and intelligent.*
3. *Carrying out research to discover, develop and disseminate science, technology and arts that improve the welfare of individuals and society, and support regional and national development, as well as contribute to solving global problems creatively and innovatively based on piety, independence and intelligence.*
4. *Carrying out creative and innovative community service and empowerment that encourages the development of human, community and natural potential to realize community welfare based on piety, independence and scholarship.*
5. *Organizing good, clean and authoritative governance and services in the implementation of higher education autonomy to create a superior, creative and innovative university based on piety, independence and intelligence.*
6. *Creating a learning process and environment that is able to empower students creatively and innovatively to carry out lifelong learning based on piety, independence and intelligence.*
7. *Develop cooperation with other institutions, both national and international, creatively and innovatively to improve the quality of implementation of Tridharma with the principles of equality and mutual benefit based on piety, independence, and scholarship.*

Foreword

We give thanks to the presence of Almighty God for His blessings and grace so that the student handbook (student handbook) Department of Chemistry Education, Faculty of Mathematics and Natural Sciences (MIPA), Universitas Negeri Yogyakarta (UNY) can be completed. Unlike the previous version, this book has been adapted to the OBE Curriculum, which has been implemented simultaneously in all UNY undergraduate study programs since semester 1 of the 2021/2022 academic year.

As the name suggests, this book was prepared to guide students in attending lectures in the Chemistry undergraduate study program. This book also aims to introduce students to various organizations, activities, and facilities available within the UNY environment. Thus, students can develop themselves optimally while taking the undergraduate program at UNY. We welcome criticism, suggestions, and feedback from various parties to improve this book in the future.

Yogyakarta, June 2023

Drafting team

Table of Contents

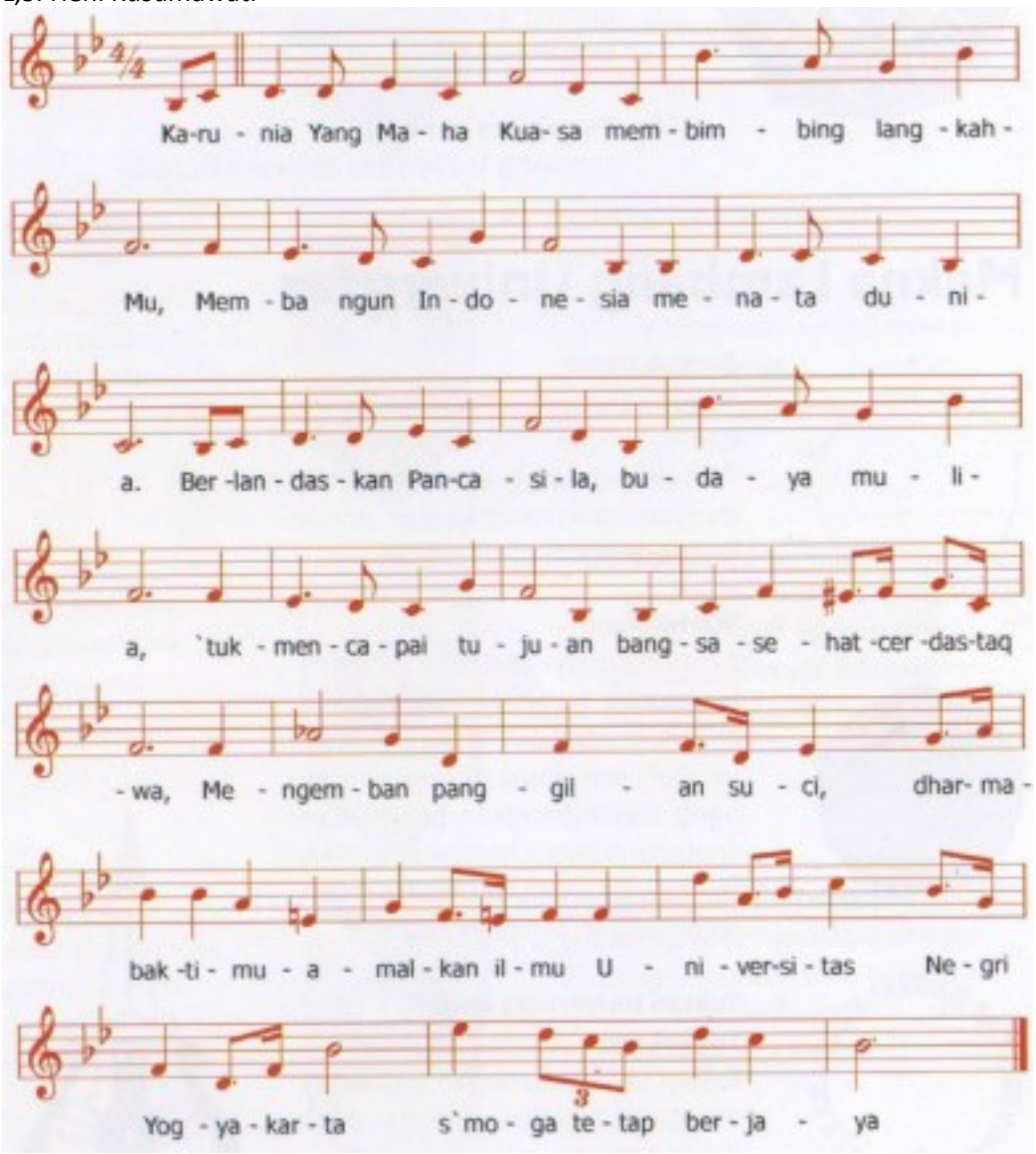
UNY Logos

Information:

The logos are shaped like a pentagonal lotus flower, and the base color is blue. Written by Universitas Negeri Yogyakarta, which is made circular with UNY calligraphy writing, the image of the wings of the Garuda Bird is yellow, and in the middle, there is an image of a monument, with a mustaka (crown) in the shape of fire split into three, stairs, chest, body, and foot of the monument.

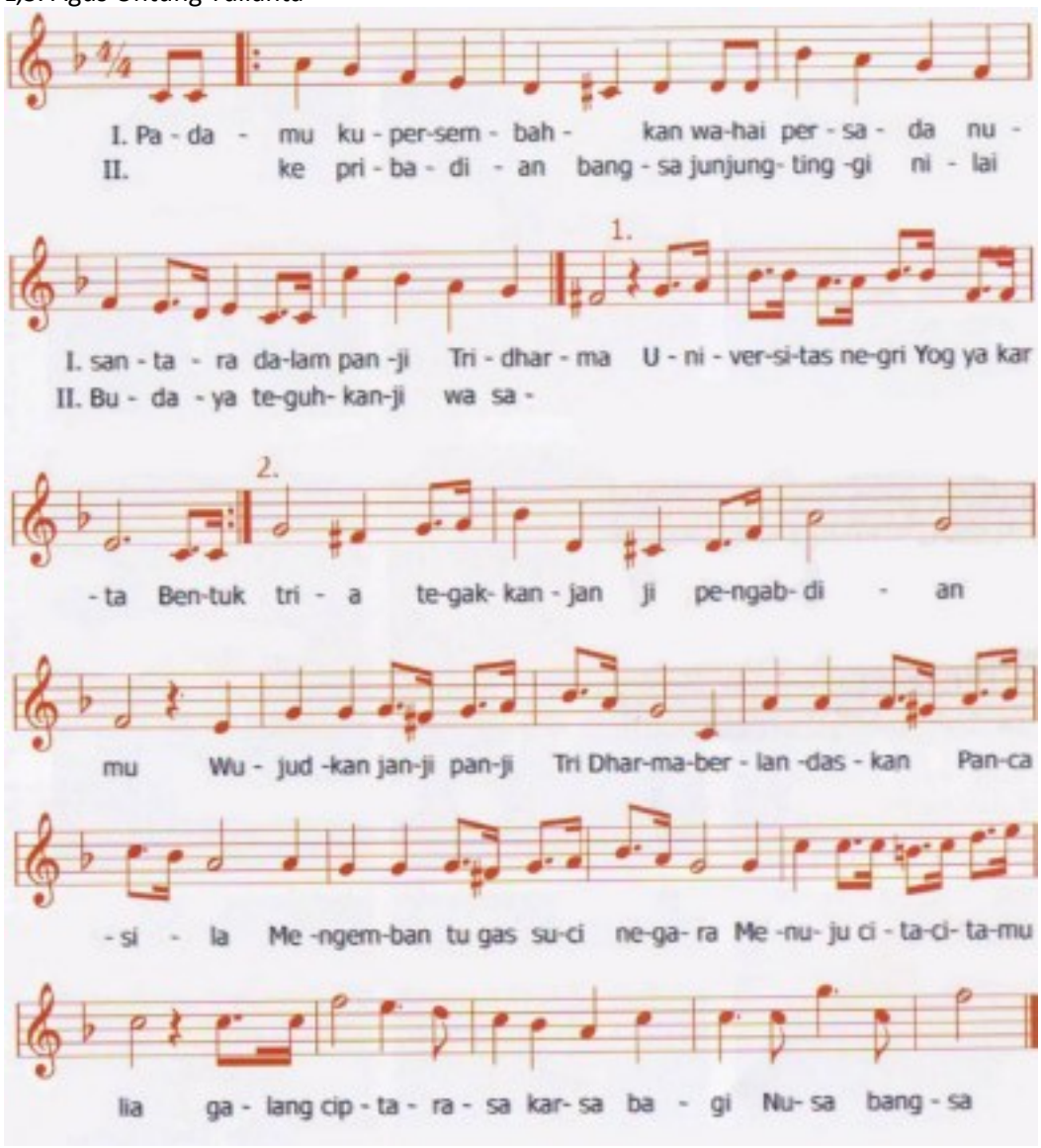
Universitas Negeri Yogyakarta (UNY) Hymn

L,S: Heni Kusumawati



Mars Universitas Negeri Yogyakarta (UNY)

L,S: Agus Untung Yulianta



Map of Universitas Negeri Yogyakarta (UNY)

1. Profile of the Department of Chemistry Education

A. Brief History

The Chemistry Education Department of Universitas Negeri Yogyakarta (UNY) was started in 1956 as chemistry B-1 courses and became a part of the Chemistry Department of FKIP/B Universitas Gadjah Mada (UGM) in 1961. When the Teacher Training and Education Institute Yogyakarta (IKIP) was established in 1964, the Chemistry Department joined under the Faculty of Teacher Training and Education (FKIP). The latter then became the Faculty of Education, Mathematics, and Natural Sciences (FPMIPA) in 1982 with four departments: Mathematics Education, Chemistry Education, Chemistry Education, and Biology Education.

In 1997, following the change of IKIP to Universitas Negeri Yogyakarta (UNY), FPMIPA opened new study programs: Chemistry, Mathematics, Chemistry, and Biology. The name FPMIPA also changed to the Faculty of Mathematics and Natural Sciences (FMIPA). Since then, the UNY Department of Chemistry Education has organized two study programs in Bachelor's Degree: the Chemistry study program and the Chemistry Education study program. Currently, the Chemistry Education Department has 4 study programs in total. Two study programs in Bachelor's Degree (Chemistry and Chemistry Education), 1 in Master's Degree (Chemistry Education), and 1 in Doctoral Degree (Chemistry Education).

B. Vision of the B.S Chemistry Study Program

The Chemistry study program has established itself as a reputable program in the Southeast Asia region, producing B.S graduates in Chemistry with academic capabilities, professionalism, superior, creative, innovative, and competitiveness in the field of chemistry, grounded in piety, independence, and intellectualism.

C. Mission

To fulfil this vision, the B.S of Chemistry Study Program has the following five mission points.

1. Education and teaching that can produce graduates who are virtuous, have academic, professional, innovative, and creative abilities in the field of chemistry, superior, independent, and highly competitive at the Southeast Asian level.
2. Chemical research that supports the development of chemistry and technology that is beneficial for improving the dignity of human life and national development.
3. Community service through efforts to disseminate and apply the results of chemical development research and participate in realizing a scientific, democratic, and independent society, to support national development.
4. Cooperation with institutions, agencies, at home and abroad, to support the implementation of teaching, research, and development of chemistry.
5. Development of the academic community to become members of the campus community who are devout, independent, intellectual, and have a love for the nation, state, and homeland.

D. Goal

Based on the vision and mission of the Bachelor Degree of Chemistry Study Program, the vision and mission of FMIPA, the vision and mission of Universitas Negeri Yogyakarta, the Indonesian National Qualifications Framework (KKNI), National Higher Education Standards (SN Dikti), and several related regulations, the Chemistry Undergraduate Study Program formulates 5 (five) PEOs, namely:

Program Educational Objectives (PEOs) of Bachelor's Degree Chemistry Study Program:

1. PEO 1: Graduates demonstrate piety, noble character, integrity, independence, responsibility, and a strong sense of nationalism in their personal and professional lives.
2. PEO 2: Graduates demonstrate skills and creativity in the field of chemistry, enabling them to achieve a competitive advantage at the Southeast Asian level.
3. PEO 3: Graduates master the scientific foundations necessary to develop their expertise in chemistry, enabling them to attain competence in the field as well as in specific chemical specializations.
4. PEO 4: Graduates apply their knowledge of chemistry to support innovation, productivity, and problem-solving that benefit society.
5. PEO 5: Graduates perform their professional roles in chemistry responsibly, ethically, and effectively in accordance with established standards.

E. Graduate Profile

The profile of graduates of the UNY Chemistry Undergraduate Study Program is as follows:

No	Profile	Description
1.	Chemical analyst	As a chemical analyst with reliable abilities and skills, such as mastery of theoretical concepts, able to formulate solutions in chemical analysis and application, and managerial skills in the laboratory
2.	Research Assistant in Industries, formal, and non-formal institutions	As a research assistant who mastered the research concept, procedure, and ethics, which include the management of research data, the publication of analysed research data
3.	Laboratory technician	Manage the laboratory and use equipment well, possessing entrepreneurial insight and competency, whether independently or with others, in the field of chemistry

F. Graduate Competencies

The competencies of graduates of the Bachelor's Degree Chemistry Study Program are stated in 9 points of the Program Learning Outcomes (PLO) below.

PLO 1	Apply a religious attitude and human values.
PLO 2	Apply the ICT effectively in their scientific field.

PLO3	Integrate various strategies and techniques in chemical research to solve problems.
PLO 4	Apply the development of science and technology as a support for lifelong learning.
PLO 5	Analyze chemical concepts and a mindset oriented toward life skills.
PLO 6	Apply an independent attitude, be able to adapt, and be responsible in completing tasks.
PLO 7	Perform to communicate ideas both orally and in writing.
PLO 8	Apply chemistry to support productive and innovative behavior to solve problems in society.
PLO 9	Integrate the mathematical and science concepts to solve problems in the field of chemistry.
PLO 10	Apply the strategy and innovation in chemical research techniques.

G. Address

Address : Building D15, Faculty of Mathematics and Natural Sciences, 3rd Floor, UNY Karangmalang Campus, Colombo Street No. 1, Yogyakarta, Indonesia.
Postal Code : 55281
Telephone : +62 274 548203, +62274 568168 psw. 1396
Fax : +62 274 548203 (Faculty of Mathematics and Natural Sciences)
Site : kimia.fmipa.uny.ac.id

H. Educator List and Field of Expertise

No	Name	Degree (College)	Field of expertise	Academic Position
1	Nurfina Aznam.	Master (Universitas Gadjah Mada) Doctoral (Universitas Gadjah Mada)	Pharmacy Natural product	Professor
2	A.K. Prodjosantoso,	Master (The University of Sydney, Australia) Doctoral (The University of Sydney, Australia)	Inorganic	Professor
3	Sri Atun	Master (Institut Teknologi Bandung) Doctoral (Institut Teknologi Bandung)	Organic Natural product	Professor
4	Endang Widjajanti L.F.X,	Master (Institut Teknologi Bandung) Doctoral (Universite de Paris VI, France)	Physical chemistry Physical chemistry	Professor

No	Name	Degree (College)	Field of expertise	Academic Position
5	Sri Handayani	Master (Universitas Gadjah Mada) Doctoral (Universitas Gadjah Mada)	Organic synthesis	Professor
6	Eli Rohaeti	Master (Institut Teknologi Bandung) Doctoral (Institut Teknologi Bandung)	Polymer	Professor
7	Hari Sutrisno	Master (Institut Teknologi Bandung) Doctoral (Universite de Nantes, France)	Inorganic chemistry Crystallography	Professor
8	Suyanta	Master (Universitas Gadjah Mada) Doctoral (Institut Teknologi Bandung)	Analytical chemistry Electrochemistry	Professor
9	Isana Supiati Yosephine Louise	Master (Universitas Gadjah Mada) Doctoral (Universitas Gadjah Mada)	Electrochemistry	Professor
10	Jaslin Ikhsan,	Master (La Trobe University, Australia) Doctoral (La Trobe University, Australia)	Physical chemistry	Professor
11	Dyah Purwaningsih	Master (Universitas Gadjah Mada) Doctoral (Universitas Gadjah Mada)	Nanochemistry	Professor
12	Retno Arianingrum,	Master (Universitas Gadjah Mada) Doctoral (Universitas Gadjah Mada)	Biochemistry	Assoc Professor
13	Susila Kristianingrum,	Master (Universitas Gadjah Mada)	Analytical chemistry	Assoc Professor
14	Cornelia Budimarwanti.	Master (Universitas Gadjah Mada)	Organic chemistry	Assoc Professor
15	Sunarto.	Master (Universitas Gadjah Mada)	Analytical chemistry	Assoc Professor
16	M. Pranjoto Utomo.	Master (Universitas Gadjah Mada)	Inorganic chemistry	Assoc Professor

No	Name	Degree (College)	Field of expertise	Academic Position
17	Erfan Priyambodo	Master (Institut Teknologi Bandung)	Analytical chemistry	Assoc Professor
18	Cahyorini Kusumawardani i.	Master (Universitas Gadjah Mada) Doctoral (Universitas Gadjah Mada)	Inorganic chemistry	Assoc Professor
19	Kun Sri Budiasih.	Master (Universitas Gadjah Mada) Doctoral (Universitas Gadjah Mada)	Bioinorganic chemistry	Assoc Professor
20	Siti Marwati,	Master (Universitas Gadjah Mada) Doctoral (Universitas Gadjah Mada)	Analytical chemistry	Assist Professor
21	Suwardi.	Master (Universitas Gadjah Mada) Doctoral (Universitas Gadjah Mada)	Computational chemistry	Assist Professor
22	Isti Yunita,.	Master (Universitas Gadjah Mada) Doctoral (Mahidol University, Thailand)	Inorganic chemistry	Assist Professor
23	Dini Rohmawati.	Master (Universitas Gadjah Mada)	Organic chemistry	Assist Professor
24	Yoga Priastomo,	Master (Saga University, Japan)	Biochemistry	Lecturer

Further information related to lecturer profiles can be seen at Direktori Staf UNY

I. Educational Facilities

Facilities or educational facilities managed by the Department of Chemistry Education include:

1. Department room
2. Lecturer room
3. Computer laboratory
4. Basic Chemistry Laboratory
5. Organic and Biochemistry Laboratory
6. Inorganic and Physical chemistry laboratory
7. Analytical chemistry laboratory
8. Instrument room
9. Research laboratory

Laboratory Complex of IDB (left), Organic and Biochemistry Laboratory (right)

The facilities or means managed by the Faculty of Mathematics and Natural Sciences include:

1. Lecture room
2. Library
3. Student club room (in the faculty student center complex)
4. Prayer room
5. Student Health Services
6. Parking Lot

J. Scientific Publication Media

The Chemistry Education Department manages 2 scientific publications as follows.

1. Jurnal Elemen Kimia

Online ISSN 3032-4483
Publisher Universitas Negeri Yogyakarta
Editor in Chief Dr. Dra. Retno Arianingrum, M.Si.
Frequency Two issues per year: April & October

Focus & Scope	Jurnal elemen kimia is a scientific journal managed by the Chemistry study program, Chemistry Education Department, FMIPA, Universitas Negeri Yogyakarta. This journal publishes research articles in chemistry and its applications, twice a year in April and October. The scope of this journal covers all areas of chemistry and its applications, including theoretical chemistry, environmental chemistry studies, inorganic, organic, physical chemistry, analytical chemistry, and biochemistry.

Link Address https://journal.student.uny.ac.id/elemen/index

Address:
Chemistry Study Program, Faculty of Mathematics and Natural Sciences, Universitas Negeri Yogyakarta Jl. Colombo No. 1, KarangMalang, Caturtunggal, Depok District, Sleman Regency, Yogyakarta Special Region 55281.

2. Indonesian Journal of Chemistry and Environment (IJOCE)

Online ISSN 2599-3186
Print ISSN -
DOI Prefix 10.21831

Publisher Universitas Negeri Yogyakarta
Editor in Chief: Dr. Cahyorini Kusumawardhani, M.Si.
Frequency 2 issues per year: June & December

Focus & Scope	Indonesian Journal of Chemistry and Environment (IJoCE) is a journal that covers all the fields of chemistry and environment, both experimental and theoretical aspects. Regular papers, letters, and review articles with content meeting the scope of the journal will be considered for publication after peer review. Authors are encouraged to submit complete original and unpublished works, which are not under review and considered to be published in any other journals. Indonesian Journal of Chemistry and Environment publishes two issues annually, in June and December.

Link Address https://journal.uny.ac.id/index.php/ijoce
Address:
Chemistry Study Program, Faculty of Mathematics and Natural Sciences, Universitas Negeri Yogyakarta Jl. Colombo No. 1, KarangMalang, Caturtunggal, Depok District, Sleman Regency, Yogyakarta Special Region 55281.

2. Course System and Curriculum

Bachelor Program (S1) Chemistry is a study program that has a minimum study load of 146 credits with an education time of 8 semesters.

A. Academic Guidance

After being accepted as a UNY student, the Department will appoint an academic advisor/supervisor for each student. Initial guidance will be carried out classically, while subsequent guidance will be carried out 3-4 times each semester, individually. The scope of academic advisors includes:

1. Consultation on taking courses at the beginning of the semester,
2. Monitoring learning progress in the middle of the semester,
3. Evaluation of lecture results at the end of the semester,
4. Consultation services for students who have problems,
5. Guide in selecting and proposing scholarships,
6. Direct students to participate in activities outside the campus (international seminars).

Students also need to consult with academic advisors when taking Educational Practical Practices (PK), Community Service Program (KKN), or Thesis (TAS). Academic advisor lecturers can be found in their respective lecturer rooms by making an appointment first.

B. Semester Credit System

The credit system is the provision of education by stating the burden of student studies, the workload of teaching staff, and the burden of administering educational institutions in the form of credit. By using this system, each student can plan how to fulfil their entire study load by considering their abilities, talents, and interests. The credit system also makes it easier to transfer credit between departments or between faculties within one university, or even between different universities. The implementation of education at UNY is based on the Semester Credit System (SKS), so that each educational activity is measured in standardized study load units.

Semester is a unit of time for an effective learning process for 16 (sixteen) weeks, excluding final semester exams. Following the regulations of the Chancellor of Universitas Negeri Yogyakarta, three semesters are held throughout one academic year, namely:

1. Odd semester: September to January of the current year.
2. Even semester: February to June of the following year.
3. Short/intermediate semester: July to August of the following year.

All the learning that every student must undergo to complete the undergraduate level is carried out in various forms of educational activities, namely lectures, practicums, seminars, practical field work/internship (PKL), community service program (KKN), and writing final assignments (undergraduate thesis).

The time allocation required to undertake educational activities of one credit (1 SKS/1 UTCS/1.6 ECTS) a week is as follows.

Types of Learning	**Time Allocation 1 credit in 1 week**
Theory (Lecture), tutorial	50 minutes of face-to-face learning 60 minutes of structured learning assignments 60 minutes of independent learning
Seminar	100 minutes face-to-face 70 minutes of independent activity
Practicum, workshop practice	170 minutes (including preparation of reports)
Research and community service	170 minutes (including preparation of proposals and reports)

For example, a student who takes a Basic Chemistry course weighing 4 credits means that he needs to devote 150 minutes of each week to taking part in lecture activities, 180 minutes to do structured learning tasks (eg, homework), 180 minutes of independent learning (eg, doing homework, re-reading lecture notes, etc), and 170 minutes of laboratory work.

C. Student Study Load

The student's study load each semester is determined by considering the abilities of student and the average study time in a day. If a student is considered working normally for 9 hours per day, then in one week, there are around 54 hours or 3,240 minutes of study time available. By looking at the time allocation of 1 credit, which is equivalent to 170 minutes, it is obtained that the student study load under normal conditions is 20 credits per semester. The individual abilities of each student are measured through the Achievement Index (GPA) in the previous semester, with the following conditions

Semester Achievement Index previously	**Maximum Study Load**		
	SKS	**UTCS**	**ECTS**
More than 3.00	24	24	38.4
2.50 – 3.00	22	22	35.2
2.00 – 2.49	20	20	32
Less than 2.00	18	18	28.8

The determination of the study load taken by students in a semester needs to be discussed with the academic advisor. Fulfilling the maximum study load can be done by adding courses as long as classes are still available and the prerequisites have been met.

D. Courses

The undergraduate program curriculum in the Department of Chemistry Education, FMIPA UNY is composed of several courses, with the weight of each expressed in credits. The

number of credits for each course is varies, determined by the scope of the material and the course load. Based on their nature, there are two groups of courses:

1. Compulsory courses must be taken/followed by all students of a study program. There are mandatory courses held by universities, faculties, and study programs. More than 75% of the courses taken by students are mandatory courses.
2. Elective Courses can be selected according to the student's interests and talents to complete the graduation requirements. When taking elective courses, it is also advisable to consider the theme of the final assignment that the student wants to write.

Each course also has a **course code** which consists of three letters followed by four numbers. The three-letter code indicates the category of the course, namely:

MKU University compulsory courses
FMI Faculty compulsory courses
KIM Study program: compulsory and elective courses
MKL Courses outside the university
TAM Final Project

A course can have a **precondition** (prerequisite), namely the requirements that must be met before taking the course. Prerequisites can be in the form of the number of credits that have been taken or obtaining a certain minimum grade in other courses.

Descriptions, learning outcomes, prerequisites, references, and assessment guidelines can be seen in the Module Handbook for each course

E. Course Structure

According to the course system with on and off-university, the distribution of courses per semester in the Bachelor's Degree of Chemistry study program is then divided into 3 study period patterns, namely 5-1-2, 6-1-1, and 6-0-2. For example, in pattern 6-1-1: 6 semesters to study in chemistry courses, 1 semester to study in courses on UNY, and 1 semester to study in courses off UNY.

SEMESTER 1

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
1	MKU6201	Religion education Islam*	2			2	
	MKU6202	Religion education Catholic*					
	MKU6203	Religion education Kristen*					
	MKU6204	Religion education Hindu*					
	MKU6205	Religion education Budha*					
	MKU6206	Religion education Konghuchu*					
2	MKU6207	Education Citizenship (Civic)	2			2	
3	MKU6211	English	2			2	
4	MKU6212	Digital Transformation	2			2	
5	MKU6213	Creativity, Innovation, and Entrepreneurship	2			2	
6	MKU6216	Social and humanitarian	2			2	

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
		literacy					
7	KIM6401	Basic chemistry	3	1		4	
8	KIM6202	Chemistry for chemistry	2			2	
9	KIM6303	Mathematics for chemistry	3			3	
		Amount	**20**	**1**		**21**	

SEMESTER 2

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
1	MKU6208	Pancasila	2			2	
2	FMI6201	Mathematics-science insights and study	2			2	
3	FMI6202	Statistics	2			2	
4	KIM6404	Chemical equilibrium	3	1		4	
5	KIM6309	Nonmetal inorganic chemistry	2	1		3	
6	KIM6214	Environmental chemistry	2			2	
7	KIM6410	Basic analytical chemistry	3	1		4	
8	KIM6227	Basic computational chemistry	2			2	
		Amount	**18**	**3**		**21**	

SEMESTER 3

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
1	KIM6405	Molecular dynamics	3	1		4	
2	KIM6406	Basic organic chemistry	3	1		4	
3	KIM6309	Metal inorganic chemistry	2	1		3	
4	KIM6311	Chemical separation methods	2	1		3	
5	KIM6215	Quantum chemistry	2			2	
6	KIM6225	Chemical laboratory management	2			2	
7	KIM6228	Advanced computational chemistry	1	1		2	
8		Specialized study program course	2			2	
		Amount	**17**	**5**		**22**	

SEMESTER 4

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
1	MKU6209	Indonesian	2				
2	KIM6307	Structure and reactivity of organic compounds	2	1			
3	KIM6412	Biochemistry	3	1			

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
4	KIM6213	Radiochemistry	2				
5	KIM6218	Polymer chemistry	2				
6	KIM6322	Coordination chemistry	2	1			
7	KIM6324	Instrumentation in chemistry	2	1			
8		Specialized study program course	2			2	
		Amount	**17**	**4**		**21**	

SEMESTER 5

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
1	KIM6217	Colloid and surface chemistry	2			2	
2	KIM6219	Physical organic chemistry	2			2	
3	KIM6220	Structure elucidation of organic compounds	2			2	
4	KIM6221	Natural product chemistry	2			2	
5	KIM6322	Atomic and molecular spectroscopic	2			2	
6	KIM6223	Crystallochemistry	2			2	
7	KIM6226	Physical biochemistry	2			2	
8	KIM6229	Selected chemistry research topics	2			2	
9		Specialized study program course	2			2	
10		Outside study program course on UNY	4			4	
		Amount	**22**			**22**	

*You can add elective courses and/or off-campus credits. For the 5-1-2 and 6-0-2 patterns, courses outside the study program can be added.

SEMESTER 6

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
1	KIM6217	Methodology for chemistry research	3			3	
2		Specialized study program course	8			8	
3		Outside study program course on UNY	8			8	
		Amount	**19**			**19**	

*You can add elective courses and/or off-campus credits. For the 5-1-2 and 6-1-1 patterns, courses outside the study program can be added.

SEMESTER 7

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
1	MKL6603	Internship (PKL)			6	6	
2	MKL6604	Community service course (KKN)			6	6	
		Amount			**12**	**12**	

SEMESTER 8

No	Code	Subject	SKS details				Prereq (Code)
			T	P	L	Qty	
1	TAM6801	Thesis	8				
		Amount	**8**			**8**	

Distribution of Elective Courses (*Advanced*) based on the competency of interest

Competency of Interest: Chemistry of Renewable and Functional Materials

No	Code	Subject	SKS details				Semester		Prereq (Code)
			T	P	L	Q	Odd	Even	
1	KIM6231	Chemical application of group theory	2			2		√	
2	KIM6232	Inorganic chemical synthesis	2			2	√		
3	KIM6233	Solid inorganic chemistry	2			2	√		
4	KIM6234	Structure analysis of inorganic compounds	2			2		√	
5	KIM6235	Nanochemistry technology	2			2		√	
6	KIM6236	Bioinorganic	2			2		√	
7	KIM6237	Organometallic	2			2	√		
8	KIM6238	Materials chemistry	2			2	√		
9	KIM6239	Membrane technology	2			2		√	
10	KIM6240	Catalysts chemistry	2			2	√		
11	KIM6259	Geochemistry	2			2		√	

Competency of Interest: Biological Chemistry

No	Code	Subject	SKS details				Semester		Prereq (Code)
			T	P	L	Q	Odd	Even	
1	KIM6241	Pharmaceutical chemistry	2			2		√	
2	KIM6242	Molecular biotechnology	2			2		√	
3	KIM6243	Food chemistry	2			2		√	
4	KIM6244	Organic chemical synthesis	2			2	√		
5	KIM6245	Isolation and identification of natural compounds	2			2	√		
6	KIM6246	Reaction mechanism of	2			2		√	

No	Code	Subject	SKS details				Semester		Prereq (Code)
			T	P	L	Q	Odd	Even	
		organic compounds							
7	KIM6247	Toxicology	2			2	√		
8	KIM6248	Enzymology	2			2	√		
9	KIM6249	Petroleum chemistry and energy	2			2	√		
10	KIM6250	Fermentation technology	2			2	√		
11	KIM6262	Medicinal chemistry	2			2		√	

Competency of Interest: Environmental Chemistry

No	Code	Subject	SKS details				Semester		Prereq (Code)
			T	P	L	Q	Odd	Even	
1	KIM6251	Analysis electrochemistry	2			2	√		
2	KIM6252	Corrosion chemistry and electroplating	2			2	√		
3	KIM6254	Radioanalysis	2			2	√		
4	KIM6255	Hazardous and toxic waste management	2			2		√	
5	KIM6256	Surfactant and additive	2			2	√		

Competency of Interest: Industrial Chemistry and Entrepreneur

No	Code	Subject	SKS details				Semester		Prereq (Code)
			T	P	L	Q	Odd	Even	
1	KIM6253	Analysis of industrial materials	2			2		√	
2	KIM6257	Industrial chemistry	2			2		√	
3	KIM6258	Industrial management	2			2	√		
4	KIM6260	Entrepreneurship	2			2	√	√	
5	KIM6261	Industrial internship	2			2	√	√	

Descriptions, learning outcomes, prerequisites, references, and assessment guidelines can be seen in the Module Handbook for each course

F. Internship

Internship (PKL) is a mandatory course weighing 6 credits for students of the Bachelor Study Program at UNY, which aims to upgrade the competencies of students with work experience. Students also validate and choose a workplace (can be an industry or institution) to be the location for their internship. The implementation of this course is regulated by the Directorate of Professional Education and Competencies at UNY.

To take the Internship course, students must fulfill the following requirements.

1. Registered as an active Chemistry undergraduate student in the semester of internship (odd semester).
2. Have taken a minimum of 100 credits with a minimum GPA of 2.50.

3. Make online registration entries via https://magang.uny.ac.id/.
4. Have the recommendation letter for PKL from the dean.

Complete provisions regarding the implementation of Educational Internships can be seen at https://magang.uny.ac.id/.

G. Final Project

The final thesis assignment for students in the Bachelor's Degree Chemistry Study Program is a mandatory course that requires students to demonstrate their ability to carry out processes and patterns of scientific thinking through research activities, as reflected in their scientific writing. This course weighs 8 credits and is taken in the fourth year.

The process of preparing a thesis in the Bachelor Degree of Chemistry Study Program cannot be separated from the courses **Methodology of Chemistry Research** (KIM6217), which provides the basics of skills for literature study, research, and writing procedures for scientific papers. Students who have fulfilled the requirements for taking a thesis (110 credits with a minimum GPA of 2.0) contact the academic advisor to ask for recommendations for writing a thesis. Recommendations and a brief description regarding the title of the final thesis assignment are consulted with the Chemistry Study Program Coordinator to determine the thesis supervisor.

Students contact the appointed supervisor to ask for the lecturer's approval. Next, students work on their thesis under the guidance of their supervisor, by filling in the final thesis assignment guidance card each time they are tutored. After the thesis has been completed, students can submit a request for the thesis examination. The thesis must be written according to the Thesis Guide for the Bachelor Degree.The process of proposing topics to proposing a thesis examination decree can be carried out online using the SIBIMTA information system (http://bimbingan.uny.ac.id).

3. Academic Life

A. Registration and Payment of Education Fees

Towards the start of the new semester (December/May/July), students are expected to monitor information on payment dates for education fees in the form of Single Tuition Fee (UKT) at Universitas Negeri Yogyakarta.

1. Payment can be made according to schedule online (online) at Bank BTN, Bank BNI, or Bank Mandiri, Branch offices/Cash Offices throughout Indonesia, or Bank BPD DIY DIY Branches/Cash Offices, by stating the Student Identification Number (NIM).
2. Students who have finished their studies and will only undergo Judiciary at the start of the semester can submit a request not to pay tuition fees/UKT to the Deputy Dean I and submit it to the PNBP Subdivision of the Finance and Accounting Section and the Registration and Statistics Subdivision at the UNY Rectorate complex. If the Judicial date exceeds the specified limit (is postponed), the student must report back to the PNBP Subdivision of the Finance and Accounting Section and pay the tuition fees/UKT for that semester.
3. If there are problems with the payment process (for example, difficulty knowing the amount of the bill, differences in the amount of the bill, etc.), students are asked to contact the UNY Finance and Accounting Department at the UNY Rectorate Building, 3rd floor, west wing, telephone (0274) 552558 **before the deadline for payment of education fees/UKT**.

Following are the steps for paying education fees at UNY using a BNI ATM:

1. Prepare a BNI ATM/debit card. Make sure the balance in the account is still sufficient.	BNI
2. After entering the card and PIN into the BNI ATM machine, select **OTHER MENUS**. **3.** Select **PAYMENT** 4. Use options **NEXT MENU** until the options appear **UNIVERSITY**. Select **UNIVERSITY**. **5.** Select **STUDENT PAYMENT CENTER (SPC)** 6. Enter the UNY educational institution code (**8015**) followed **NIM** you.	

7. Information will appear on the screen in the form of the student's name, NIM, faculty, and the amount of the bill. If the information is correct, select it **YES PAY**. 8. Select the type of account used to pay. 9. Transaction is complete. The ATM machine will issue proof of payment. Save the evidence that well.	

Students who do not register by paying educational fees until the payment deadline expires will have their status processed **college leave**. Further provisions regarding lecture leave can be seen on page 20.

B. Filling in the Study Plan Card

Students who have registered are entitled to take part in educational activities in that semester. Therefore, students must design learning activities in the next semester by filling in the Study Plan Card (KRS) online in their **SIAKAD** account (https://siakad.uny.ac.id/). The KRS filling process is as follows.

1. Students are required to ask for consideration and approval from the Academic Advising Lecturer before completing the KRS online, regarding courses and number of credits.
2. Students open a SIAKAD account with their respective email and password. Furthermore, during the KRS filling period, the system will display a list of courses available for that semester, along with the name of the lecturer, lecture schedule, and remaining student capacity. Students can choose the courses they want to take. Automatically, the SIAKAD system will limit the number of course credits that can be taken based on the previous semester's GPA achievements.
3. Academic advisors provide online approval regarding the number of credits taken by students for the semester that will be undertaken based on the GPA achieved in the previous semester.
4. Students can cancel courses taken in the current semester no later than the 8th (eighth) week starting from the first week of lectures with the approval of the online PA lecturer.
5. Students can add a maximum of one course in the current semester, no later than the 3rd (three) week starting from the first week of lectures, provided that it does not exceed the maximum study load allowed in one semester.

The inclusion of courses in the KRS gives students the right to take the Final Semester Examination (UAS). A student is only permitted to take the UAS for the courses listed in his KRS.

C. Lectures

At the first meeting or face-to-face meetings for each course, the lecturer will generally

explain the course description, syllabus, handbook/reference, learning strategies, and assessment system. Next, the lecturer and students will sign a lecture contract, which contains the frequency of assignments, quizzes, additional exams, and the minimum attendance and assessment weight agreed between the lecturer and students. Lectures can be held face-to-face or in-person blended, namely a combination of direct face-to-face and online learning.

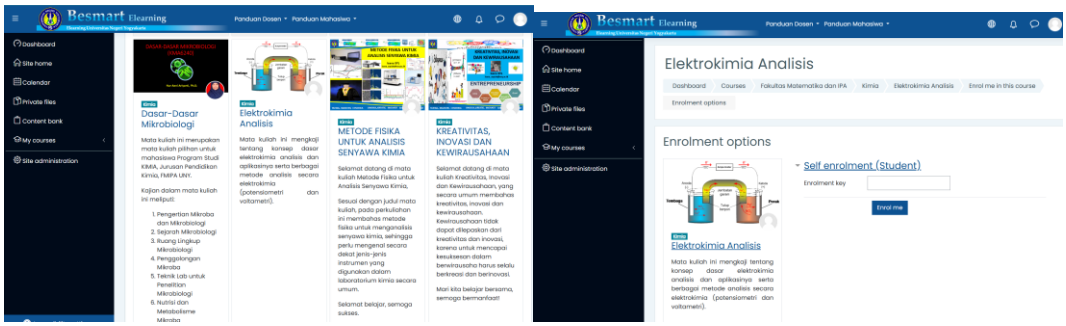
Direct Face-to-Face Lectures

Face-to-face lectures are conducted in the lecture rooms available at UNY's Faculty of Mathematics and Natural Sciences. When attending lectures, students must be present on time and comply with the FMIPA UNY lecture rules and regulations as agreed in the lecture contract. Attendance for face-to-face lectures is carried out online via http://siakad.uny.ac.id.

Studying with E-Learning

Online lectures at the UNY Department of Chemistry Education are carried out via the website http://besmart.uny.ac.id. After logging in by entering student email account and password, users can choose faculties, study programs and courses. In each course, various files are available (videos, material summaries, handout) which students can download. Students can also take quizzes online.

View of the online lecture site at UNY



Online lectures can also be combined with face-to-face lectures, which are known as a blended learning method.

D. Assessment and Testing

Assessment of students' abilities in a course is carried out through course achievement assessments (CPMK) and final semester exams. CPMK assessments can come from individual and group assignments, quizzes and projects, as listed in the module handbook for each course. The Final Semester Examination (UAS) is an examination whose implementation is scheduled according to the academic calendar. The UAS schedule and location are announced on the FMIPA website and notice board. Each maximum student only takes two exams in one day.

The final grade (NA) obtained by students for a course (MK) is an accumulation of the grades obtained per learning sub-achievement and the final semester exam (UAS), with the weights determined in the module handbook. The final score is expressed in letters and

numbers based on the range of scores obtained according to the table below.

Scale (0-100)	Mark	
	Letter	Number
86 – 100	A	4.00
81 – 85	A-	3.67
76 – 80	B+	3.33
71 – 75	B	3.00
66 – 70	B-	2.67
61 – 65	C+	3.33
56 – 60	C	2.00
41 – 55	D	1.00
0 – 40	AND	0.00

Students who have not completed and submitted assignments related to the subject in question will not be given a grade and will be marked K on the grade list. The K mark can be changed to the proper grade if the student has completed and submitted the assignments within a maximum period of one semester. If the assignment is not fulfilled, students will receive a grade according to the existing assignment/component achievements.

The final grades for each student can be accessed at http://siakad.uny.ac.id by logging in using each student's account. Based on the final grades, the Semester Achievement Index (IP) can be determined by: the number of letter grades that have been transferred to numerical grades/weights multiplied by the number of course credits divided by the number of credits taken by the student concerned in a particular semester.

Students who are not satisfied with their grades can submit a complaint to the lecturer by bringing supporting evidence. The lecturer checks the document and decides whether changes in grades need to be made. Lecturers can change grades directly through SIAKAD as well as submit minutes of grade complaints to the head of study program, which is copied to the dean. Applications for grade complaints can also be submitted through the Study Program management, which will then be reviewed for the need for reassessment. The administrator will contact the lecturer concerned and discuss changes in grades.

The Achievement Index influences the number of credits that students can take in the next semester. It is hoped that students can know the maximum number of credits that can be taken in the next semester and can use the exam results to consider the courses they will take in the next semester.

E. Lecture Leave

To apply for leave, a Chemistry Undergraduate Study Program student must meet the following requirements:

1. Have studied for a minimum of one semester, with at least 10 credits and an GPA (IPK)

index of at least 3.00.

2. Not a scholarship recipient.
3. Have not exceeded the limit for the number of study leaves.

Provisions for the implementation of lecture leave:

1. Lecture leave is not counted as a study period, and you are not required to pay educational fees.
2. The permitted length of study leave is 2 (two) semesters while studying.
3. Students who do not register at the start of the semester will be processed for college leave automatically.
4. Study leave is automatically granted a maximum of two times, as long as the student still has the right to study leave.
5. Students who are on leave from college do not have the right to obtain academic services and utilize academic facilities.
6. Students who have already registered can apply for leave from study and cancel their study plans, but the educational fees that have been paid cannot be withdrawn.
7. If after taking study leave for two consecutive semesters, students do not register in the following semester, then the semester during study leave is counted as a study period. If a student wants to re-register, the student must pay the tuition fees for the previous and future semesters.
8. Students who have taken leave from college for two consecutive semesters and do not register in the following two semesters in a row are declared to have resigned as WA students and are entitled to obtain a certificate of having attended college (SKPK).

Applications for study leave are made via http://eservice.uny.ac.id, with the appropriate procedures established and submitted each semester according to the established schedule.

F. Transfer and Transfer of Credit

Provisions regarding credit transfer or credit transfer (recognition of courses taken by students outside UNY), study program transfer (student transfer from one study program to another study program at UNY), to university transfer (student transfer from UNY to another university) have been regulated in detail in Chancellor's Decree no.1 of 2019 concerning Academic Regulations.

G. Community Service Program (KKN)

Community Service Program (KKN) is a course with a weight of 3 credits and has a status **must pass** for all UNY undergraduate students as a form of community service (PPM). The implementation of KKN is interdisciplinary, also integrating education, research, and community service activities. Through KKN, students learned to be active in the community.

There are four types of KKN held at UNY. **Integrated KKN** is a KKN activity carried out in an integrated manner with PPL at schools in special semesters. **Community KKN** is a KKN carried out

in communities, both rural and urban, in special semesters. **Independent KKN** is a KKN held in the community in odd and even semesters. **Thematic KKN** is a KKN with a specific theme determined by UNY, regional government, central government, or state institutions.

The process of implementing KKN in a special semester generally consists of three stages as follows.

Level	Information
Preparation	Feasibility study and licensing of KKN locations. Student registration, group formation. Providing students who are prospective KKN participants.
Implementation	Departure of students participating in KKN. Guidance by lecturers at KKN locations. Monitoring the implementation of KKN by the team.
Evaluation	Evaluation of program success and implementation. Preparation of individual, group and team reports. Follow up on KKN results.

Further information regarding KKN and complete guidance can be obtained through the Community and Internship Service Unit UNY (https://mkpk.uny.ac.id/index.php/ and http://kkn.mkpk.uny.ac.id).

H. Judicium and Graduation

To be declared graduate, an undergraduate student at UNY must meet the following requirements.

1. Have passed at least 146 SKS subjects, consisting of all compulsory courses plus elective courses according to the applicable curriculum.
2. Have a GPA (IPK) index of at least 2.50.
3. The maximum number of credits for courses with a D grade is 10% of the total number of credits.
4. Does not have an E value
5. Have English language skills with a minimum ProTEFL score of 425.

Students who have fulfilled the requirements mentioned above are allowed to register for the judicium. This event can also be understood as announcing grades to students as a final assessment process for all courses taken, determining grades on academic transcripts, and determining the pass ability status of the student. Judicium decisions are taken in a judicial meeting held by the Faculty Senate and expressed in the form of a Dean's Decree. Judicium is held every month in each faculty. The Judicium Process also determines a student's graduation predicate according to the following table.

Predicate	GPA	Study period
With the highest praise (With highest praise)	4,00	4.0 years
With compliments (Cum laude)	3,51-4,00	≤ 4.5 years
Very satisfactory (very satisfactory)	3,01-3,50	-
Satisfying (satisfactory)	2,50-3,00	-

To be able to take part in the judiciary, students need to prepare files consisting of:

1. Study Result Document (DHS)
2. Theory Free Certificate

   The Study Results Document and Theory Free Certificate must be signed by the academic supervisor (PA) and the Head of the respective Department.
3. Library Borrow Free Certificate

   A certificate of free library borrowing must be obtained from the UNY Library UPT and the UNY Mathematics and Natural Sciences Faculty Library. For UNY Library UPT, students can obtain the letter online via http://library.uny.ac.id/member/login/, after completing the obligation to return all books and upload the final thesis manuscript. Guidelines for uploading final assignment manuscripts can be seen at panduan.pdf.

The judicial registration procedure is as follows:

1. Students who have fulfilled all the requirements take the judicial registration form at the Education Subdivision, Faculty of Mathematics and Natural Sciences (Locker D15 building, 1st floor).
2. Students fill out the judicial registration form, then ask for an endorsement signature from the Head of the Study Program.
3. Students submit the form back to the Education Subdivision by submitting the requirements in the form of a Study Results Document (DHS), proof of payment of last semester's education fees, approval from the Academic Advisor Lecturer, Theory Free Certificate, Library Borrow Free Certificate, and Borrow Free Certificate laboratory equipment.
4. Students register for Judicium online via their **SIAKAD** account (http://siakad.uny.ac.id).
5. Students check the draft diploma and draft transcript, especially when writing their name, date of birth and course grades. Writing errors, if any, must be revised immediately.
6. Students pay graduation fees and graduation fees at the same time.
7. Students take part in the Judiciary ceremony.

The judicium ceremony is held by the faculty and must be attended by all students who have registered for that month. Judicial participants must arrive on time in the specified clothing (white shirt top, black trousers/skirt bottoms, black formal shoes). Judicial participants who are unable to attend will be included in the following month's judiciary.

Graduation is the final process in a series of academic activities at higher education. As a sign of confirmation of the completion of the study, an inauguration procession was held at the UNY open senate meeting. Graduation is held by the University four times a year, namely in February, May, August, and November.

4. Student Activities and Organizations

To support self-development especially soft skill students, Universitas Negeri Yogyakarta provides various activities and organizations, both at the department, faculty, and university levels.

A. Activities and Organizations at the Department Level

The Chemistry Student Association or often referred to as the Chemistry Association (Himpunan Mahasiswa Kimia, HIMAKI), is one of the organizations at the faculty level that includes students from the UNY Chemistry Education Department. Through HIMAKI, it is hoped that they can conduct their talents, interests, and be able to become facilitators for other students to develop their knowledge and build relationships between students of the Department of Chemistry Education.

B. Activities and Organizations at the Faculty Level

Student activities and organizations at the UNY Mathematics and Natural Sciences Faculty level include the Student Advisory Council (DPM) and the FMIPA Student Executive Board (BEM). In connection with student interests and talents, there are several student activity units (UKM):

1. HANCALA Nature Lovers UKM.
2. UKM Islamic Spirituality HASKA JMF.
3. SEKRUP Theater UKM.
4. KSI MIST Research UKM.
5. BIONIC Bird Watching UKM.

The secretariat for this organization is located in the FMIPA UNY complex.

C. Activities and Organizations at the University Level

The Student Executive Body – Student Republic (BEM REMA), the Student Representative Council (DPM), and the Student Consultative Council (MPM) are student organizations at the Universitas Negeri Yogyakarta level. In addition, it aim to accommodate student interests, talents, and foster student achievement. There are a number of Student Activity Units (Unit Kegiatan Mahasiswa, UKM) at the university level, which can be grouped based on their scope as follows.

Field of Reasoning

To respond to developments in science and technology, UNY carries out special strategies to accommodate and develop all students potential and interests in the fields of science and technology. Reasoning activities at UNY include the following SMEs:

1. Research SMEs
2. UKM Student Press Institute "Expression"
3. UKM Radio “Magenta FM”
4. UKM Foreign Languages
5. Technology Engineering SMEs

Field of Arts

UNY develops student creativity and potential in the arts field through a number of UKMs:

1. UKM Family of Traditional Arts Students (Kamasetra)
2. UKM Student Choir (PSM) "Swara Wadhana"
3. Music UKM "Sicma"
4. Fine Arts and Photography UKM (Serufo)
5. UKM Literature and Theater Study Unit (Unstrat)

Sports Field

Developing sports skills for students aims to maintain student fitness and health and support UNY students' achievements in the field of sports. Sports activities are coordinated within the following SMEs:

1. Athletic UKM
2. Chess UKM
3. Swimming UKM
4. Archery UKM
5. Hockey UKM
6. Table tennis UKM
7. Tennis UKM
8. Judo UKM
9. Pencak silat UKM
10. Karate UKM
11. Tae Kwon Do UKM
12. Pecinta alam UKM
13. Volley UKM
14. Basketball UKM
15. Sepak takraw UKM
16. Football UKM
17. Baseball-Softball UKM
18. Marching band UKM
19. Badminton UKM

Welfare and Special Interest Areas

Student development in this field is a vehicle for improving student welfare, both physically and mentally, as well as students' special interests.

1. UKM Unit Kegiatan Kerohanian Islam (UKKI)
2. UKM Christian Student Fellowship (PMK)
3. UKM Catholic Student Family Association (IKMK)
4. Hindu Dharma Student Family UKM (KMHD)
5. Racana WR Scout UKM. Supratman and Racan Fatmawati
6. UKM Indonesian Red Cross Volunteer Corps (KSR-PMI)
7. UKM Student Regiment (Menwa) "Pasopati"
8. Student Cooperative UKM "Kopma UNY"
9. UKM Entrepreneurship (KWU)

D. Cross-University Activities and Organizations

There are several cross-university Chemistry student organizations that can be a means of expanding relationships and increasing student experience, for example, Ikatan Association Mahasiswa Kimia Indonesia (IKAHIMKI).

5. Supporting Facilities

Supporting facilities that can be accessed/utilized by students at the Department of Chemistry Education at UNY following the applicable regulations, include the following.

A. Library

Yogyakarta State University Library UPT provides various services for the UNY academic community and for the general public outside UNY. Online access to the UNY library's public catalog can be done via the website http://library.uny.ac.id/sirkulasi/, while direct access can be done in the Library building which is located about 150 meters to the east of the UNY Mathematics Education Department. The UNY library has also subscribed to various journals, both national and international, for example JSTOR, SPRINGER LINK, EBSCO, PROQUEST, and others, which can be accessed through a special internal network for UNY academics (http://sso.uny.ac.id).

Apart from that, UNY also has an Internal Repository which contains scientific work documents, theses, theses, dissertations, research and journals originating from the UNY academic community, which can be accessed via the website http://e.library.uny.ac.id/ . For theses, theses and dissertations, access to the complete manuscript can only be done in the library building.

Library services for academics majoring in Mathematics Education at UNY are also provided by the MIPA faculty library which is located on the 3rd floor of the FMIPA UNY Laboratory and Integrated Library building. All students from the Department of Mathematics Education, FMIPA UNY automatically become members of this library. Information regarding library catalogs and services is available at http://library.fmipa.uny.ac.id/.

B. Sports Facilities

The Yogyakarta State University (UNY) complex in Karangmalang has a number of sports facilities which are quite complete and can be used by students according to the provisions, for example:

1. Swimming pool
2. Sportsmart/Sports equipment shop
3. Sports dormitory
4. Tennis court indoor
5. Archery range
6. Basketball court
7. Community Sports Park
8. Football and athletic fields
9. Fitness Center

C. Means of Worship

UNY Mujahidin Mosque with an area of 1,920 m^2 and can accommodate up to 3,500 worshipers, located right to the west of the Faculty of Mathematics and Natural Sciences/Department of Chemistry Education campus. This mosque, which has been renovated

three times with an initial architecture similar to the Nabawi Mosque, has become the center of worship for the Muslim academic community in the Department of Chemistry Education. Apart from that, there is an Al-Furqon prayer room in the UNY Mathematics and Natural Sciences Faculty complex.

Places of worship for various religions are not difficult to find around the UNY campus, for example, the Ocean Star Chapel in Sagan, St. John the Apostle in Pringwulung, Indonesian Christian Church (GKI) Gejayan, Jagatnatha Sorowajan Temple, Poncowinatan Temple, and others.

D. Student and Multicultural Center (SMC)

The UNY Student and Multicultural Center (SMC) building is the center of UNY student activities, which provides free space for creativity and interaction between students. Apart from rooms for university-level student organizations such as BEM and UKM, this three-story building is also equipped with a meeting hall and a spacious lobby. This facility is located 100 meters north of the Department of Chemistry Education/Faculty of Mathematics and Natural Sciences, UNY.

E. Banking Facilities

A number of banks that have branch/cash offices on the UNY campus include Bank BPD DIY and Bank BNI, both of which are located on Jalan Gejayan (around 400 meters east of the Mathematics Education Department). Apart from that, there are also Automated Teller Machines (ATMs) around the Chemistry Education Department, namely at the Kopma UNY Mini Market and UNY Plaza.

F. Food and Daily Needs

KOPMA UNY Cooperative Mini Market provides various student needs ranging from stationery and office supplies, daily equipment and supplies, snacks, drinks, to photocopying. Located 50 meters north of the Department of Chemistry Education/Faculty of Mathematics and Natural Sciences UNY.

Food Court UNY is a snack and food center that is beautifully arranged, complete with shady trees, ornamental plants, joglo buildings and a number of gazebos. It is very comfortable to use for eating various foods or having casual conversations. Located right to the east of the Department of Chemistry Education/Faculty of Mathematics and Natural Sciences, UNY.

Garden Cafe UNY is a food and drink stall which is very suitable for students to gather and discuss, and is equipped with a hot spot area, LCD, projector and cable TV. Located 50 meters north of the Department of Chemistry Education/Faculty of Mathematics and Natural Sciences UNY.

Plaza UNY is a four-story building located 200 meters east of the Department of Chemistry Education/Faculty of Mathematics and Natural Sciences UNY. Plaza UNY consists of a minimarket that provides daily necessities, several food stalls, clothing, electronic repair

services, and reflexology massage services.

G. Accommodation

UNY Hotel is a hotel located in the campus area, right next to UNY's Mathematics and Natural Sciences Faculty. This hotel offers comfort, cleanliness, friendliness and a strong academic feel. For students from outside the area, the communities around UNY (including the Karangmalang, Kuningan, Santren, Karangasem, Deresan, Mrican, Klebengan, and Samirono areas) provide boarding rooms with various facilities and prices.

H. Health Facilities

UNY Health Services (LK) is a technical implementation unit tasked with providing health services for students, lecturers, and educational staff within UNY. Some of the services provided include health checks, medication, health consultations, simple laboratory tests (cholesterol, blood glucose, uric acid, pregnancy tests, blood group tests), examinations of pregnant women, First Aid services for Accidents (PPPK) in various activities. large scale, community service, and health education. This service can be contacted by telephone 0274-586168 ext. 1324.

Apart from health services, UNY also has a physical therapy clinic located to the west of UNY GOR. Physical therapy clinics treat various injuries, sprains, aches, etc. This clinic is open from 09.00 to 17.00 WIB, and is served by professional therapists.

For students who need emergency and inpatient services, there are several hospitals around UNY, namely:

1. RSUP Dr. Sardjito, Jalan Kesehatan 1, Sendowo, Yogyakarta (± 2.5 km from FMIPA UNY).
2. Panti Rapih Hospital, Jalan Cik Di Tiro 30, Yogyakarta (± 1 km from FMIPA UNY).
3. Jogjakarta International Hospital (JIH), Jalan Pajajaran/Ring Road Utara 160 (± 4 km from FMIPA UNY).
4. Siloam Hospital Yogyakarta, Jalan Urip Sumoharjo (± 1.5 km from FMIPA UNY).
5. An-Nur Special Surgical Hospital, Jalan Colombo (± 500 m from FMIPA UNY).
6. Yap Hospital, Jalan Cik Di Tiro 5 (± 1.5 km from the UNY campus).

I. Counseling, Career and Legal Guidance

Counseling guidance and psychological welfare services for the UNY academic community are provided by the Guidance and Counseling Services Technical Implementation Unit (UPT LBK), located in Karangmalang Yogyakarta, telephone 0274- 589536, 386168 Psw. 314. This service can also be accessed online via http://upt-lbk.uny.ac.id. Face-to-face services are provided every Monday-Friday at 09.00-13.00 WIB or outside hours with prior agreement. Students can get counseling services (except psychological tests) for free.

Career development, including employment information, career guidance and consultation, as well as tracer study, is provided by the Career Development Center (Career Development Center/CDC) UNY via https://karir.uny.ac.id/. Apart from that, CDC UNY also

holds Job Fairs twice every year, which are attended by dozens of companies.

UNY also has a Legal Assistance and Consultation Services UPT, which can be contacted by telephone 0274-586168 Psw. 420 or 0274 545097.

J. Bookstore

Books published by UNY Press can be purchased at the UNY Bookstore, the Engineering Faculty Complex at UNY, or via the website https://unypress.uny.ac.id/. General published books can be obtained at several bookstores around UNY, such as Social Agency, Toga Mas, and Gramedia. Cheap book markets, which sell new and used books at negotiable prices, can be found in the Terban area (Jl. Kahar Muzakir) and Taman Pintar Yogyakarta (Jl. Sriwedani).

PERSONAL NOTE