

**ACADEMIC GUIDELINE
MASTER PROGRAM IN CLINICAL PHARMACY**



**FACULTY OF PHARMACY
2019**

CHAPTER I HISTORY OF THE FACULTY, VISION, MISSION, OBJECTIVES AND GRADUATE COMPETENCIES

1.1 History

The Faculty of Pharmacy, previously having the status as the Department of Pharmacy, was established on February 19, 1959, as the fifth of the seven departments belonged to the Faculty of Exact and Natural Sciences (FIPPA), Universitas Padjadjaran. At that time, academic activities of the Department of Pharmacy took place at Jl. Ir. H. Juanda No. 4 Bandung and the Institute of Natural Sciences (LIPA) at Jl. Singaperbangsa No. 1 Bandung. In 1978, the location moved to Jl. Maulana Yusuf No. 12 Bandung, which was previously occupied by the Faculty of Dentistry. After the new campus of the Faculty of Mathematics and Natural Sciences (FMIPA) in Jatinangor-Sumedang was completed, the Department of Pharmacy, together with other departments at FMIPA, moved to the campus in Jatinangor on September 1986. On October 17, 2006, the Department of Pharmacy changed its status become the Faculty of Pharmacy.

Currently, the Faculty of Pharmacy has 5 study programs, namely the Bachelor of Pharmacy Study Program, the Pharmacist Professional Program, Master Program in Pharmacy, the Master Program in Clinical Pharmacy, and the Doctoral Program in Pharmacy.

The Bachelor of Pharmacy Study Program (known as Program Studi Sarjana Farmasi (PSSF) was started in 1959. This study program has obtained an A accreditation from the Independent Accreditation Institution for Higher Education for Healthcare (LAM-PTKes) and its qualifications have been recognized by the Public Service Bureau (known as Jawatan Pengkhidmatan Awam (JPA) of Malaysia. Since 2006, PSSF has been accepting students from Malaysia.

The Pharmacist Professional Study Program was started in 1959 and has obtained an A accreditation from the

Independent Accreditation Institution for Higher Education for Healthcare (LAM-PTKes).

The Master program in Pharmacy was started since January 10, 2011 after obtaining the permission from the Ministry of National Education. This study program began accepting new students in the semester period of August - February in Academic Year 2011/2012 and obtained an A accreditation from LAM-PTKes in December 2017.

The Master Program in Clinical Pharmacy was started in the semester period of August - February in Academic Year 2016/2017 and obtained an A accreditation from LAM-PTKes in November 2017.

The Doctoral Program in Pharmacy was started in the semester period of August - February in Academic Year 2016/2017 and obtained a B accreditation from LAM-PTKes in December 2017.

1.2 Vision and Mission

1.2.1 Vision and Mission of the Faculty of Pharmacy

The vision of the Faculty of Pharmacy is to become the faculty of excellence in the implementation of research-based pharmaceutical education which is internationally competitive by 2024.

The mission of the Faculty of Pharmacy is:

1. Organizing research-based pharmaceutical education which is able to meet the demands of the community and has international competitiveness.
2. Organizing professional and accountable management of pharmacy higher education to improve public image.
3. Carrying out pharmaceutical research with local excellence which oriented towards scientific publications, patents and commercial products.
4. Organizing community service by utilizing the results of research in the pharmaceutical field.
5. Organizing cooperation in the pharmaceutical sector with the pentahelix concept.

1.2.2 Vision and Mission Master Program in Clinical Pharmacy

The vision of the Master Program in Clinical Pharmacy is to become an Excellent Master Program in Pharmacy in Research and International Competitive by 2024.

The mission of the Master Program in Clinical Pharmacy of the Faculty of Pharmacy is:

1. Organizing research-based master of clinical pharmacy education which is relevant to the development of science and technology and meets the demands of the community.
2. Organizing the management of the Master of Clinical Pharmacy Study Program which are professional, accountable and regionally competitive.
3. Carrying out research which oriented towards scientific publications, innovative products and superior policies in the clinical pharmacy field.
4. Carrying out services / community services by utilizing the results of research in the clinical pharmacy field.
5. Organizing cooperation in the clinical pharmacy sector through the pentahelix concept.

1.3 Purpose

1.3.1 Objectives of the Faculty of Pharmacy

The objectives of the Faculty of Pharmacy are:

1. Creating pharmacy higher education graduates who are able to meet the demands of the community and have international competitiveness.
2. Realizing a professional and accountable education management to improve the public image.
3. Producing scientific publications, patents, and commercial products from local excellence-based pharmaceutical research.
4. Increasing the use of research results in the pharmaceutical sector which are appropriate for the benefit of the community.
5. Realizing mutual benefit in the pharmaceutical sector through

the concept of pentahelix.

1.3.2 Objectives of Master of Clinical Pharmacy Study Program

The master program in clinical pharmacy is an advanced practice program which objectives of this program are based on competences of the pharmacist professional program graduates and International-based clinical pharmacist competencies. This program ensures that the graduates possess the knowledge, skills, attitude, and behaviours necessary to deliver comprehensive medication management in team-based (interprofessional collaboration), direct patient care environments. The objectives of this program are:

1. Produce graduates that competence in clinical pharmacy with respect the characteristics of National culture in the world cultural diversity.
2. Increase the research-based learning quality according to Universitas Padjadjaran Principal Scientific Pattern (PIP) and local wisdom.
3. Increase the quality of scientific publication, innovative product and policy in the field of clinical pharmacy.
4. Able to conduct academic studies, research and innovation, and solving problems in the relevant community or pharmaceutical service through developing their knowledge and expertise, especially in the field of clinical pharmacy.
5. Enhance role of clinical pharmacist in strategic collaboration (academic, investor, government, community and media) for better community wellness.

1.4 Targets

The targets of Masters of Clinical Pharmacy Study Program at the Faculty of Pharmacy are:

1. The realization of competent human resources in the field of clinical pharmacy, who have RESPECT character and upholding the

- nobility of Sundanese and national culture in the diversity of world cultures.
2. Improving the quality of research-based learning that is oriented towards PIP and local wisdom in the context of community development in West Java.
 3. Improving the management and institutional quality of the Faculty of Pharmacy's Masters of Clinical Pharmacy Study Program by implementing Continuing Quality Improvement.
 4. The realization of successful and efficient management of Faculty of Pharmacy Masters of Clinical Pharmacy Study Program's facility by utilizing resource sharing.
 5. The realization of integrated information system in the Faculty of Pharmacy's Masters of Clinical Pharmacy Study Program to achieve excellence in the academic.
 6. Increasing scientific publications, innovative products and superior policy products in the field of clinical pharmacy.
 7. The realization of the contribution of Masters of Clinical Pharmacy Study Program to the welfare of the people of West Java and the National.
 8. Increasing the role of Masters of Clinical Pharmacy Study Program and its strategic partners (academics, business actors, government, society, media) for the improvement of community welfare.

CHAPTER II MANAGEMENT OF MASTER OF CLINICAL PHARMACY STUDY PROGRAM

2.1 Graduate Profile

After going through the academic and non-academic learning process, graduates are expected to have general competences and special skills in accordance with the uniqueness of clinical pharmacy expertise.

Main competencies are in the form of Knowledge/Scientific Mastery, which is being able to solve problems in clinical pharmacy, hospital pharmacy or clinical laboratories using an inter- or multidisciplinary approach that is based on theoretical concepts of philosophy of science, research methodology, biostatistics, introduction to clinical and community pharmacy, clinical toxicology, clinical pharmacokinetics, drug information, counseling, evidence-based medicine, and aseptic techniques to improve public health status.

Other Competencies, which are typical competences for the alumni of the Faculty of Pharmacy's Master of Clinical Study Program, namely:

1. Able to carry out lifelong learning and serve the community based on research (Transformative Learning) which is based on Unpad Principal Scientific Pattern, namely *Bina Mulia Hukum dan Lingkungan* in National Development.
2. Having Responsible, Excellent, Scientific Rigor, Professional, Encouraging, Creative, and Trust (RESPECT) characters.
3. Able to uphold the noble values of Sundanese culture and national culture in the diversity of world cultures.

formed during the learning process at the Master of Clinical Pharmacy Study Program.

2.2 Learning Outcomes

Learning outcomes of Master of Clinical Pharmacy Study Program include the concept of attitudes, knowledge, and general and specific skills.

ATTITUDE

1. Fear God Almighty and be able to show a religious attitude.
2. Uphold the value of humanity in carrying out clinical pharmacy tasks based on religion, morals, and ethics.
3. Contribute to improving the quality of life in a society, nation, state and the advancement of civilization based on Pancasila

4. Acting as a proud and loving citizen of the homeland, having nationalism and a sense of responsibility to the country and nation.
5. Respect the diversity of cultures, views, religions, and beliefs, as well as the original opinions or findings of others, especially in the field of clinical pharmacy.
6. Work together and have social sensitivity and care for the community and the environment.
7. Obey the law and discipline in social and state life.
8. Internalize academic values, norms, and ethics, especially in clinical pharmacy.
9. Demonstrating a responsible attitude towards clinical pharmacy work independently.
10. Internalize the spirit of independence, struggle, and entrepreneurship in the field of clinical pharmacy

GENERAL SKILLS

1. Able to develop logical, critical, systematic, and creative thinking in pharmaceutical science and technology through scientific research and compile scientific conceptions from the results of studies based on scientific principles, procedures and ethics in the form of theses that are disseminated in scientific meetings, both national and international and / or published at least in an accredited national journal or international journal.
2. Able to conduct academic studies or studies according to their field of expertise in the field of clinical pharmacy in solving problems in the relevant community or industry through developing their knowledge and expertise, especially in the field of clinical pharmacy.
3. Able to compile and communicate ideas, results of thought and scientific arguments responsibly and based on academic ethics

through the media to the academic community and the wider community.

4. Able to identify scientific fields that are the object of research and position them into a research map developed through an interdisciplinary or multidisciplinary approach, especially in clinical pharmacy
5. Able to make decisions in the context of solving problems of developing science, knowledge and technology, especially in the field of clinical pharmacy, based on analytical or experimental studies of information and data.
6. Able to manage, develop and maintain a network of colleagues, colleagues within institutions and the broader research community.
7. Able to increase the capacity of learning independently, especially in the field of clinical pharmacy.
8. Able to document, store, secure, and rediscover research data in order to ensure validity and prevent plagiarism.

A. Clinical Pharmacy Concentration

1. Knowledge:

1. Able to solve clinical pharmacy service problems using an inter or multidisciplinary approach that is based on theoretical concepts of philosophy of science, research methodology, biostatistics, introduction to clinical and community pharmacy, clinical toxicology, clinical pharmacokinetics, drug information, counseling, evidence-based medicine, Inter Professional Collaboration (IPC), and aseptic techniques to improve public health.
2. Able to identify, analyze and formulate problem-solving strategies for clinical pharmacy services based on the principles of clinical pharmacy practice, pharmacoepidemiology and pharmacoconomics to improve the degree of public health.

2. Specific skills

1. Able to make pharmaceutical care plans in order to improve the quality of life of patients.
2. Able to be part of the health team in patient care to participate in making professional contributions in improving the quality of life of patients.
3. Able to identify Drug Related Problems (DRPs) and provide professional solutions for DRPs findings.
4. Able to monitor drug therapy effectively and efficiently in order to optimize drug use
5. Able to provide objective and up-to-date information services, either independently or as part of the information service unit for patients, health workers and other parties in need.
6. Able to calculate nutritional requirements and prepare aseptic preparations.
7. Able to manage the incidence of poisoning or clinical toxicology
8. Able to perform dosage calculations and adjustments for patients
9. Able to carry out disease management in the fields of psychiatry, gastrology, obstetrics and gynecology, nervous system, endocrine, heart, kidney and blood vessels, oncology, infection, respiratory system, immunology, children, medical intensive care unit optimally.

B. Clinical Biochemistry Concentration

1. Knowledge:

1. Able to solve clinical biochemistry laboratory service problems using an inter or multidisciplinary approach that is based on theoretical concepts of philosophy of science,

research methodology, biostatistics, introduction to clinical and community pharmacy, clinical toxicology, clinical pharmacokinetics, drug information, counseling, evidence-based medicine, Inter Professional Collaboration (IPC), and aseptic techniques to improve public health degrees.

2. Able to identify, analyze and formulate problem-solving strategies for diagnosis in clinical laboratories based on clinical biochemical theory, cell and molecular biology, genetics, pharmacology, molecular mechanisms of disease, technology and clinical laboratory information systems, development of In vitro diagnostics (industry), next generation medicine and clinical laboratory practice principles.

2. Specific Skills

1. Able to apply various chemical & biochemical analysis methods and data management methods generated by clinical laboratories.
2. Able to apply knowledge of molecular mechanisms of disease and in vitro technology to help make a diagnosis in a clinical laboratory.
3. Able to explain disease mechanisms by applying knowledge of molecular biology and genetics
4. Able to apply knowledge of technology and laboratory information systems in clinical laboratories.
5. Able to apply knowledge of the in vitro diagnostic industry
6. Able to be part of the health team in patient care to participate in making professional contributions in improving the quality of life of patients

2.3 Study Material

The formulation of courses in the Padjadjaran University Master of Clinical Pharmacy Study Program is based on the profile of the

graduate and the mastery of skills from each profile. The steps taken in this case are:

1. Determination of Study Materials (BK) which refers to learning outcomes (CP), as well
2. Identify the breadth and depth of study material that must be mastered based on the scientific field.

No.	Learning Outcome	Course Substances	
		Clinical Pharmacy	Clinical Biochemistry
1	Able to do direct patient care including identifying and prioritizing patient problems, medication-related needs, evaluate drug therapy for appropriateness, effectiveness, safety, adherence, and affordability	✓	
2	Able to develop or initiate therapeutic plans and address medication-related problems, follow up on and monitor the outcomes of therapeutic plans	✓	
3	Able to collaborate with other health care teams to achieve optimal patient outcome across the continuum of care and apply knowledge of the roles and responsibilities as a clinical pharmacist	✓	✓

4	Able to demonstrate and apply in-depth knowledge of pharmacology, pharmacotherapy, pathophysiology, epidemiology and the clinical signs, symptoms, and natural history of diseases to locate, evaluate, interpret and assimilate the decision of therapy.	✓	
5	Able to apply knowledge of pharmacoeconomics and risk-benefit analysis, resolve medication-related problems to improve patient-specific/population-based care health and quality.	✓	✓
6	Able to communicate effectively with patients, caregivers, families, and laypersons of diverse backgrounds, also with other health professionals and stakeholders.	✓	✓
7	Able to apply various chemical & biochemical analysis methods and data management methods generated by clinical laboratories.		✓
8	Able to apply knowledge of molecular mechanisms of disease and in vitro technology to help make a diagnosis in a clinical laboratory.		✓
9	Able to explain disease mechanisms by applying knowledge of molecular biology and genetics		✓
10	Able to apply knowledge of technology and laboratory		✓

	information systems in clinical laboratories.		
11	Able to apply knowledge of the in vitro diagnostic industry		✓

2.4 Courses structures

The course structure applied in the Faculty of Pharmacy's Master of Clinical Pharmacy Study Program contains learning outcomes that refer to the description of the levels of the Indonesian National Qualifications Framework (KKNI) in accordance with Presidential Decree No. 8 of 2012 and National Higher Education Standards as stated in Permenristekdikti No. 44 of 2015. This curriculum is periodically changed every 5 (five) years in a Curriculum Change Workshop and is evaluated annually in a Curriculum Evaluation Workshop. Education in the Master of Clinical Pharmacy Study Program consists of 4 semesters with a minimum study load of 44 credits.

Curriculum of Master Program In Clinical Pharmacy :

2.4.1 Clinical Pharmacy Concentration

First Semester :

No	Courses Code	Compulsory Courses	SKS
1	P20B.010 01	Philosophy of Science	2
2	P20B.010 02	Research Methodology	2
3	P20B.010 03	Biostatistics	2
4	P20B.010 04	Introduction to Clinical Pharmacy and Community	2

Elective Courses			
5	P20B.010 05	Management of Disease I : Psychiatry, Gastroenterology, Obstetrics and Gynecology, Nervous Disease	2
6	P20B.010 06	Clinical Pharmacy Practice : Gastroenterology, Obstetrics and Gynecology, Nervous Disease	3
Total			13

Second Semester :

N o	Courses Code	Compulsory Courses	SKS
1	P20B.020 14	Clinical Toxicology	2
2	P20B.020 15	Clinical Pharmacokinetics	2
3	P20B.020 16	Drugs information, Counselling, and Evidence Based Medicine	2
4	P20B.020 17	Aseptic Techniques	2
5	P20B.020 20	Research Proposal Seminars	2
Elective Course			
6	P20B.020 18	Management of Disease II: Endocrine, Heart, Blood vessel and Renal	2
7	P20B.020 19	Clinical Pharmacy Practice Endocrine Heart Blood vessel and Renal	3
Total			15

Third Semester :

N o	Courses Code	Compulsory Courses	SKS
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1	P20B.030 26	Pharmacoepidemiology and Pharmacoeconomics	2
Elective Course			
2	P20B.030 27	Management of Disease III : Oncology and Infection, Respiratory, System Immunology	2
3	P20B.030 28	Clinical Pharmacy Practice : Oncology and Infection, Respiratory, System Immunology	3
Total			7

Fourth Semester :

No	Courses Code	Compulsory Courses	SKS
1	P20B.040 33	Progress Report	2
2	P20B.040 34	Research Seminar	3
3	P20B.040 03	Magister Comprehensive Deffense	3
4	P20B.040 35	Scientific Paper	1
Total			9

2.4.2 Clinical Biochemistry Concentration

First Semester :

No	Courses Code	Compulsory Courses	SKS
1	P20B.010 01	Phylosophy of Science	2
2	P20B.010 02	Research Methodology	2

3	P20B.010 03	Biostatistics	2
4	P20B.010 04	Introduction to Clinical Pharmacy and Community	2
Elective Course			
5	P20B.010 10	Clinical Biochemistry	2
6	P20B.010 11	Cell and Molecular Biology	2
7	P20B.010 12	Genetics	2
8	P20B.010 13	Pharmacology	2
Total			16

Second Semester :

No	Courses Code	Compulsory Courses	SKS
1	P20B.020 14	Clinical Toxicology	2
2	P20B.020 15	Clinical Pharmacokinetics	2
3	P20B.020 16	Drugs information, Counselling, and Evidence Based Medicine	2
4	P20B.020 17	Aseptic Techniques	2
5	P20B.020 20	Research Proposal Seminars	2
Elective Course			
6	P20B.020 23	Molecular Mechanism of Disease	3
7	P20B.020 24	Technology and Laboratory Information System	3

8	P20B.020 25	In Vitro Diagnostic Product Development	2
Total			18

Third Semester:

No	Kode Mata Kuliah	Compulsory Courses	SKS
1	P20B.030 31	<i>Next Generation Medicine</i>	2
2	P20B.030 32	Clinical Laboratory Practice	2
Total			4

Fourth Semester

No	Kode Mata Kuliah	Compulsory Courses	SKS
1	P20B.040 33	Progress Report	2
2	P20B.040 34	Research Seminar	3
3	P20B.040 03	Magister Comprehensive Deffense	3
4	P20B.040 35	Scientific Paper	1
Total			9

2.5 Learning Methods, Form, and Programs

Course code	Courses	Learning program	Learning form	Learning methods	Lecturer
P20B.01001	Science Phylosophy	is a Philosophy of Science course covering the following subjects: the essence of the philosophy of science: definition, scope, and objectives; The concept of the philosophy of science; History of philosophy and development of science	Lecture, discussion	Collaborative learning, project based learning, problem based learning	Prof Dr Moelyono MW., M.Sc., Apt Prof Dr Johanes Cornelius Mose,dr., Sp.OG, KFM.
P20B.01002	Research methodology	discusses various aspects related to the research process which includes problem formulation, literature review, hypothesis formulation, research design preparation, data collection, data processing and analysis, interpretation of analysis results, and conclusions. In addition, this course discusses how to write research proposals, research reports, and scientific papers for publication in scientific journals.	Lecture, discussion	Collaborative learning, project based learning, problem based learning	Prof. Dr. Anas Subarnas, M.Sc., Apt Rizky Abdulah, Ph.D., Apt. Mughtaridi, Ph.D., M.Si, Apt
P20B.01003	Biostatistic	Discusses the use of statistical methods in the design, analysis, interpretation, and presentation of biological experiments and their observations. Descriptive	Lecture, discussion	Collaborative learning, project based learning, problem based learning	Dr. Hadyana Sukandar, M.Sc Neily Zakiyah, Ph.D., Apt.

		<p>statistics, elements in experimental design, probability, hypothesis testing and statistical interference, analysis of variance, correlation, regression techniques, and non-parametric statistical methods are also discussed. During the lecture, there will be given the application of statistical techniques in a biological context using laboratory data and field data</p>			
P20B.01004	Introduction to Clinical and Community Pharmacy	<p>The introduction to clinical and community pharmacy discusses the history and development of clinical pharmacy, clinical pharmacy activities include medical history interviews, therapy monitoring, drug interaction management, drug information services, counseling, clinical pharmacy case approach using the SOAP, FARM, and PAM methods.</p>	Lecture, discussion	Collaborative learning, project based learning, problem based learning	<p>Dr. Keri Lestari, M.Si., Apt. Dika Pramita, M.Si., Apt. Dr. Siti Saidah, Apt.</p>
P20B.01005	Disease Management I: Psychiatry,	<p>Disease management I discusses the definition and</p>	Lecture, discussion	Collaborative learning, project based	<p>Melisa I. Barliana, Dr.Med.Sc., Apt.;</p>

	Gastroenterology, Obgyn, Nerves	terminology, epidemiology, etiology, pathophysiology, interpretation of clinical data, pharmacotherapy, monitoring and case studies of diseases: menstrual disorders, disorders of pregnancy and breastfeeding, stroke and epilepsy, depression and schizophrenia, hepatitis, cirrhosis, peptic ulcers, diarrhea / constipation / GERD.		learning, problem based learning, cooperative learning	Prof Dr Johannes Cornelius Mose,dr., Sp.OG, KFM.; Dr. <i>Lucky Saputra SpKJ(K)</i> ., MKes; Dr. <i>H. Primal Sudjana</i> , Sp.PD,KPT
P20B.01006	Clinical Pharmacy Practice for Disease Management I: Psychiatry, Gastroenterology, Obgyn, Nerves	Clinical Pharmacy Practice for Disease Management I is a practical course for Disease Management I. Students practice at the hospital in the section of Psychiatry, Gastroenterology, Obgynology, and Nerves.	Clinical Practice	Group discussions, Experience-based learning, problem based learning, cooperative learning, collaborative learning	Melisa I. Barliana, Dr.Med.Sc., Apt; Practical advisor/ Preceptor Team (doctors and pharmacists at the hospital)
P20B.02014	Clinical Toxicology	Clinical toxicology, including sources, mechanisms, and ways of handling toxic substances that occur in many patients and discussion of cases. Toxic substances include pesticides, microorganisms, narcotics, cholinergic and	Lecture, discussions	Collaborative learning, problem based learning, cooperative learning	Dr. Sri Adi Sumiwi, M.Si, Apt. <i>Trully Deti Rose Sitorus</i> , Dr., Spfk(K) .,M.Si.

		anticholinergic drugs, heart drugs, hypnotic-sedative drugs.			
P20B.020 15	Clinical Pharmacokinetics	On this topic, students will learn about clinical pharmacokinetics, which is the application of pharmacokinetics in clinics, which in the interest of Community and Clinical Pharmacy, is more focused on designing dosage regimens for individual patients, especially for narrow therapy index drugs, due to various factors influencing the quality of the subject, namely drug factors (dosage form, dosage regimen, route of administration, bioavailability, dose-dependency), internal factors (age, sex, pregnancy, weight, genetics, race, disease), and external factors (synthetic drugs, traditional medicine, natural medicine, food (including food supplements), beverages, pollutants, altitude, and diurnal. Therefore, to support the success	Lecture, discussions	Collaborative learning, problem based learning, cooperative learning	Prof. Ahmad Muhtadi, M.Si., Apt. Prof. Rovina, Ph.D., dr

		of therapy, these subjects were monitored for drug levels in the blood (therapeutic drug monitoring, TDM), so that the correct dosage regimen could be determined for these subjects.			
P20B.020 16	Drug Information, Counseling, and Evidence Base Medicine (EBM) → Inter Professional Collaboration (IPC)	Inter Professional Collaboration is needed by students when meeting with patients to be able to collaborate with other health professionals (doctors, nurses, dentists, psychologists, psychiatrists). In addition, it will discuss drug information and evidence based medicine (EBM) which discusses drug information units and its various activities, systematic search for information sources and critical analysis, methods of answering questions & delivering information, methods & simulations of IEC, definitions and classes of EBM, the application of EBM in clinical pharmacy practice.	Lecture, discussions	Collaborative learning, problem based learning, cooperative learning	Dr. Keri Lestari, M.Si., Apt. Dika Pramita, M.Si., Apt.

P20B.020 17	Aseptic Technique	Aseptic technique discusses matters related to the preparation of intravenous dosage forms, namely introduction to intravenous therapy, Total Parental Nutrition (TPN), calculation and manufacture of TPN preparations, monitoring of TPN, methods of mixing intravenous drugs, handling cancer drugs, factors that influence compatibility and incompatibility of intravenous preparations, fluid therapy.	Lecture, discussions	Collaborative learning, problem based learning, cooperative learning	Irma Melyani Puspitasari, Ph.D., Apt. Cherry Rahayu M.KM., Apt.
P20B.020 18	Disease Management II: Endocrine, Heart, Blood Vessels, Kidneys	Disease Management II: discusses definitions and terminology, epidemiology, etiology, pathophysiology, interpretation of clinical data, pharmacotherapy, monitoring and case studies of diseases: diabetes mellitus, thyroid, kidney and urinary tract diseases, heart disease, and blood vessel disorders.	Lecture, discussions	Collaborative learning, project based learning, problem based learning, cooperative learning	Dr. Keri Lestari, M.Si., Apt. Dr.dr. Hikmat Permana, Sp.PD-KEMD. dr. Triwedya Indra Dewi, Sp.JP. dr. Budhi Prihartanto, Sp.PD.
P20B.020 19	Clinical Pharmacy	Clinical Pharmacy Practice for Disease		Group discussions,	Melisa I. Barliana,

	Practice for Disease Management II: Endocrine, Heart, Blood Vessels, Kidney	Management II is a practical course for Disease Management II. Students practice at the hospital in the section of endocrine, heart, blood vessels and kidneys.	Clinical Practice	Experience-based learning, problem based learning, cooperative learning, collaborative learning	Dr. Med.Sc., Apt; Practical advisor/ Preceptor Team (doctors and pharmacists at the hospital)
P20B.030 26	Pharmacoepidemiology and Pharmacoeconomics	Students will learn about the introduction of pharmacoepidemiology, pharmacoepidemiological perspectives, experimental design in the study of pharmacoepidemiology, applications of pharmacoepidemiology in supporting clinical pharmacy services, economic aspects of drug use, public health and the role of pharmacy in realizing a healthy society.	Lecture, courses	Collaborative learning, project based learning, problem based learning, cooperative learning	Auliya Abdurrohman Suwantika, Ph.D., Apt. Rizky Abdullah, Ph.D., Apt. Rano Kurnia Sinuraya, M.KM., Apt.
P20B.030 27	Disease Management III: Oncology, Infection, Respiratory and Immunology	Students will learn about definitions and terminology, epidemiology, etiology, pathophysiology, interpretation of clinical data, pharmacotherapy, monitoring and case studies of diseases: asthma and COPD,	Lecture, discussions	Collaborative learning, project based learning, problem based learning, cooperative learning	Dr. Rizka Andalusia, M.Farm., Apt.; dr. Ruri Intania, Sp.P; Dr.dr. Prayudi Santoso, Sp.PD-KP, M.Kes; <i>dr. Laniyati Hamijoyo Sp</i>

		respiratory infections, tuberculosis, pneumonia, allergies, SLE, rheumatoid, lung cancer, breast cancer, blood cancer, colorectal cancer, urinary tract infections, HIV/AIDS, sepsis, and fungal infections.			PD-KR, M.Kes
P20B.03028	Clinical Pharmacy Practice for Disease Management III: Oncology, Infection, Respiratory and Immunology	In Clinical Pharmacy Practice for Disease Management III students will practice directly in the hospital in the oncology, infection, respiratory, and immunology sections.	Clinical Practice	Group discussions, Experience-based learning, problem based learning, cooperative learning, collaborative learning	Melisa I. Barliana, Dr.Med.Sc., Apt; Practical advisor/ Preceptor Team (doctors and pharmacists at the hospital)
P20B.02020	Research Proposal Seminar	Students carry out a research proposal seminar containing a research proposal which will later be used as a thesis title and become a graduation requirement. The parameters of this research proposal will be assessed, namely the background, methods, and visibility of the research by examiners and also supervisors.	Seminar	Collaborative learning, project based learning, problem based learning,	Advisory and examiner team

P20B.040 33	Progress report	Discusses student research progress reports	Seminar	Collaborative learning, project based learning, problem based learning	Head of Department and advisory team
P20B.040 34	Research Result Seminar	Students present research results that have been submitted during the Research Proposal Seminar. The results of this research will be reviewed by examiners and supervisors	Seminar	Collaborative learning, project based learning, problem based learning	Advisory and examiner team
P20B.040 35	Scientific work	Discuss scientific journal article outputs conducted by students	Seminar	Collaborative learning, project based learning, problem based learning	Melisa I. Barliana, Dr.Med.Sc., Apt.
P20B.040 03	Thesis Exam	Discusses comprehensively related fields of science	Seminar	Collaborative learning, project based learning, problem based learning	Advisory and examiner team

Course s code	Courses	Learning program	Learning form	Learning methods	Lecturer
P20B.0 1001	Science phylosophy	is a Philosophy of Science course covering the following subjects: the essence of the philosophy of science: definition, scope, and objectives; The concept of the philosophy of science; History of philosophy and development of science	Lecture, discussion	Collaborative learning, project based learning, problem based learning	Prof Dr Moelyono MW., M.Sc., Apt Prof Dr Johannes Cornelius Mose,dr., Sp. OG, KFM.
P20B.0 1002	Research methodology	discusses various aspects related to the research process which includes problem formulation, literature review, hypothesis formulation, research design preparation, data collection, data processing and analysis, interpretation of analysis results, and conclusions. In addition, this course discusses how to write research proposals, research reports, and scientific papers	Lecture, discussion	Collaborative learning, project based learning, problem based learning	Prof. Dr. Anas Subarnas , M.Sc., Apt Rizky Abdullah, Ph.D., Apt. Muchtaridi, Ph.D., M.Si, Apt

P20B.0 1003	Biostatistics	Discusses the use of statistical methods in the design, analysis, interpretation, and presentation of biological experiments and their observations. Descriptive statistics, elements in experimental design, probability, hypothesis testing and statistical interference, analysis of variance, correlation, regression techniques, and non-parametric statistical methods are also discussed. During the lecture, there will be given the application of statistical techniques in a biological context using laboratory and field data	Lecture, discussion	Collaborative learning, project based learning, problem based learning	Mutakin, Ph.D., Apt.
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P20B.0 1004	Introduction to Clinical and Community Pharmacy	The introduction to clinical and community pharmacy discusses the history and development of clinical pharmacy, clinical pharmacy activities include medical history interviews, therapy monitoring, drug interaction management, drug information services, counseling, clinical pharmacy case approach using the SOAP, FARM, and PAM methods.	Lecture, discussion	Collaborative learning, project based learning, problem based learning	Dr. Keri Lestari, M.Si., Apt. Prof. Ajeng Diantini, M.Si., Apt. Dr. Lies Gantini, Apt.
P20B.0 1010	Clinical Biochemistry	Mata This Clinical Biochemistry course discusses the physiological functions of protein, carbohydrate and fat metabolism in the body normally, under conditions of disruption	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Dr. Eli Halimah, M.Si., Apt. Melisa I. Barliana, Dr. Med.S c., Apt. Dr. Nyi Mekar Saptarini, Apt.

		(pathophysiology) , as well as biochemical parameters that can be used for the diagnosis of these diseases.			Dr. Trilis Yulianti, Apt.
P20B.01011	Molecular Cell Biology	On this topic, students will learn about cell physiology and methods of molecular analysis of cell function. Students will study the material: How cells read the genome: from DNA to protein, genetic switch, cell membrane, membrane transport, cell communication mechanisms, Cell signaling, Cell signaling: G protein-coupled receptor (GPCR), Cell signaling: Receptor Tyrosine Kinase, Cell signaling: Guanylyl cyclase receptor, Cell signaling: gated	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Melisa I. Barliana, Dr.Med.Sc., Apt. Dr. Tina Rostinawati Dr. Marita Kaniawati , drg. Ferry Sandra, PhD.

		ion channel and adhesion receptor, Cell signaling: Nuclear receptor, cell cycle, and cell signaling and cancer.			
P20B.01012	Genetics	On this topic students will learn about macromolecules: DNA, RNA, chromosomes and proteins (structure and their differences), genetic information flow (replication, transcription and translation) in prokaryotes, regulation of transcription of gene expression in prokaryotes (for example three operons), regulation of transcription of expression. genes in eukaryotes, DNA mutations and repair, plasmids (replication),	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Dr. Tiana Milanda, M.Si., Apt. Dr. Tina Rostinawati Riezki Amalia, Ph.D.

		transfer of genetic material: conjugation and transformation, transposons and transpositions, viral and viral oncogenes, cytogenetics, genetic diseases, molecular genetics and biotechnology, therapeutic protein and protein engineering.			
P20B.0 2013	Pharmacology	Pharmacology lectures aim to provide insight and understanding of the action of drugs on various drug targets including ion channels, receptors, enzymes, and carrier proteins, so that after attending Pharmacology courses, students are expected to understand the mechanism of	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Prof. Anas Subarnas , Ph.D., Apt. Prof. Jutti Levita, M.Si., Apt.

		action of drugs at the cellular and molecular levels.			
P20B.0 2014	Clinical Toxicology	Clinical toxicology, including sources, mechanisms, and ways of handling toxic substances that occur in many patients and discussion of cases. Toxic substances include pesticides, microorganisms, narcotics, cholinergic and anticholinergic drugs, heart drugs, hypnotic-sedative drugs	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Dr. Rini Hendriani , Apt. Dr. Bertha Pangaribuan, Apt.
P20B.0 2015	Clinical Pharmacokinetics	On this topic, students will learn about clinical pharmacokinetics, which is the application of pharmacokinetics in clinics, which in the interest of Community and Clinical Pharmacy, is more focused on designing dosage	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Prof. Ahmad Muhtadi, M.Si., Apt. Taofik Rusdiana, Ph.D., Apt.

		<p>regimens for individual patients, especially for narrow therapy index drugs, due to various factors influencing the quality of the subject, namely drug factors (dosage form, dosage regimen, route of administration, bioavailability, dose-dependency), internal factors (age, sex, pregnancy, weight, genetics, race, disease), and external factors (synthetic drugs, traditional medicine, natural medicine, food (including food supplements), beverages, pollutants, altitude, and diurnal. Therefore, to support the success of</p>			
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		therapy, these subjects were monitored for drug levels in the blood (therapeutic drug monitoring, TDM), so that the correct dosage regimen could be determined for these subjects.			
P20B.0 2016	Drug Information , Counseling , and Evidence Base Medicine (EBM) → Inter Professional Collaborati on (IPC)	Inter Professional Collaboration is needed by students when meeting with patients to be able to collaborate with other health professionals (doctors, nurses, dentists, psychologists, psychiatrists). In addition, it will discuss drug information and evidence based medicine (EBM) which discusses drug information units and its various activities, systematic search for information sources and	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Dr. Keri Lestari, M.Si., Apt. Auliya Abdurrohimi Suwantika, Ph.D., Apt.

		critical analysis, methods of answering questions & delivering information, methods & simulations of IEC, definitions and classes of EBM, the application of EBM in clinical pharmacy practice			
P20B.0 2017	Aseptic Technique	Aseptic technique discusses matters related to the preparation of intravenous dosage forms, namely introduction to intravenous therapy, Total Parenteral Nutrition (TPN), calculation and manufacture of TPN preparations, monitoring of TPN, methods of mixing intravenous drugs, handling cancer drugs, factors that	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Irma Melyani Puspitasari, Ph.D., Apt. Dr. Bayu Winata Putra, Apt.

		influence compatibility and incompatibility of intravenous preparations, fluid therapy..			
P20B.0 2023	Molecular Mechanisms of Disease	Molecular mechanisms of disease address the molecular pathophysiology of disease and the signals involved in cells	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Dr. Sri Adi Sumiwi, M.Si., Apt. Dr. Anna Meiliana, Apt.
P20B.0 2024	Technology and Laboratory information system	Technology and Laboratory information system course study how information delivery system, information and patient data storage using latest system available.	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Dr. Aliya Nur Hasanah, Dr. Ida Musfirah, Dr. Mizwar Fatah, Dr. Wiwik Rositawati.
P20B.0 2025	Development of In Vitro Diagnostic (Industry)	This course studies the development of the latest systems, methods and technology in the in vitro diagnostic industry	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Prof. Muchtaridi, Ph.D., Apt. Dr. Cristina Sandjaja, M.Kes., MM.

P20B.0 3031	New Generation of Medicine	This course studies the development of the new generation of medicine, such as precision medicine, targeted drug therapy, gene therapy and so on	Lecture, discussion	Collaborative learning, problem-based learning, cooperative learning	Prof. Dr. Ajeng Diantini, Apt. Andi Wijaya, Ph.D., Apt.
P20B.0 2020	Research Proposal Seminar	Students carry out a research proposal seminar containing a research proposal which will later be used as a thesis title and become a graduation requirement. The parameters of this research proposal will be assessed, namely the background, methods, and visibility of the research by examiners and also supervisors.	Seminar	Collaborative learning, project based learning, problem-based learning	Advisory and examiner team
P20B.0 3032	Clinical Laboratory Practice	Practices in the field of clinical laboratories, in vitro diagnostic	Clinical practie	Group discussions, experience based learning,	Melisa I. Barliana, Dr.Med.S c., Apt.

		industry, and stem cell industry		problem based learning, cooperative learning, collaborative learning	Practice advisory team/ Preceptor
P20B.0 4033	Progress report	Discusses student research progress reports	Seminar	Collaborative learning, project based learning, problem-based learning	Head of Department and advisory team
P20B.0 4034	Research Result Seminar	Students present research results that have been submitted during the Research Proposal Seminar. The results of this research will be reviewed by examiners and supervisors	Seminar	Collaborative learning, project based learning, problem-based learning	Advisory and examiner team
P20B.0 4035	Scientific work	Discuss scientific journal article outputs conducted by students	Seminar	Collaborative learning, project based learning, problem-based learning	Melisa I. Barliana, Dr.Med.S c., Apt.
P20B.0 4003		Discusses comprehensively	Seminar	Collaborative learning,	Advisory and

	Thesis Exam	related fields of science		project based learning, problem-based learning	examiner team
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CHAPTER III ASSESSMENT AND REPORTING SYSTEM

Master of Clinical Pharmacy Study Program of the Faculty of Pharmacy, Universitas Padjadjaran uses the Semester Credit System in the implementation of its education. Provision of education on the basis of this semester credit system can provides opportunities for:

1. Students who are smart and active in learning can complete studies in shorter duration.
2. Students can take courses according to their abilities, talents and interests.
3. Conducting the best possible student evaluation.

3.1 Basic Understanding

Some of the basic definitions used in the semester credit system are explained as follows.

Semester is the smallest unit of time used to express the length of teaching process activities of a program in an educational level. The implementation of one complete level of education program from beginning to end will be divided into a number of semester

activities, so that at the beginning of each semester students must plan the learning activities that will be undertaken in that semester.

One semester is equivalent to learning activities for about 16 (sixteen) working weeks, ended by the end semester exam. One academic year consists of two regular semesters, namely the odd semester and the even semester.

The Semester Credit System is an educational system using Semester Credit Units (SKS) to state:

1. Student learning load.
2. Lecturer workload.
3. Learning experience.
4. Cost of administering the program

Semester Credit Unit (SKS) is a measure of the study load to the learning experience taken during one semester through scheduled activities per week.

Study Load per Semester is the number of credits taken by a student in a semester, while the **Cumulative Study Load** is the minimum number of credits a student must take to complete the learning process in a particular study program.

Cumulative Study Time is the maximum amount of time a student can take in completing his studies in an educational program. For the Master of Pharmacy Study Program, a minimum of 42 credits and a maximum of 48 credits are scheduled for a four-semester and a maximum of 8 semesters study period, academic leave is not counted as a student's study period. For students who have not been able to complete their studies in four years (8 semesters) without justifiable reasons, these students are declared to have failed to take part in the

Masters Program at the Faculty of Pharmacy of Universitas Padjadjaran.

One semester credit unit (SKS) for college activities is set to be equivalent to the study load each week for one semester, which consists of the following three activities:

1. 1 hour (50 minutes) of scheduled lectures.
2. 1 hour (60 minutes) of structured activities outside the classroom.
3. 1 hour (60 minutes) of independent activities.

One SKS for seminar activity basically refers to lecture activities (point 1). The number of literature used as a reference and summarized for presentation in front of the forum is a minimum of 3 (three) titles, depending on the weight of the literature.

One SKS for practicum activities in the laboratory is set to be equivalent to a study load of about 170 minutes of scheduled laboratory work, accompanied by structured activities outside the laboratory, but planned by the teaching staff concerned, including discussions and writing reports every week for one semester and independent activities, including reading reference books, deepening the material and completing assignments.

One credit unit for fieldwork, clinical work and similar activities is set to be equivalent to a workload of 170 minutes scheduled activities per week for one semester. One credit unit for thesis writing, research activities, and similar activities basically refers to fieldwork.

One credit for internship report writing activities refers to fieldwork, is set to be equivalent to

a workload of 170 minutes scheduled activities per week for one semester.

The learning process is carried out using the student-centered learning (SCL) method. The implementation of this method is adjusted to the policies of each study program, including problem-based learning, role play, simulations, case studies, presentations, mini lectures and group discussions.

3.2 Student registration

At the beginning of each semester students are required to make two types of registration, namely administrative registration and academic registration.

3.2.1 Administrative registration

1. Administrative registration is carried out to fulfill specified administrative requirements and to obtain a student card;
2. For new students, the requirements for registration are :
 - a. Pass the specified examination/selection.
 - b. Carry the exam/selection card.
 - c. Shows an original Bachelor's or equivalent certificate and submitting the copy that have been legalized.
 - d. Fill out and resubmit registration form.
 - e. Pay the Education Administration Fee (BPP) for the applicable semester.
3. For old students, the requirements for registration are:
 - a. Pay the BPP for the applicable semester according to the herregistration schedule.

- b. Shows the last/ongoing student card.
4. Students who do not carry out administrative registration (herregistration) are not allowed to carry out academic registration (fill in KRS) and are not entitled to academic services at the faculties and study programs.

3.2.2 Academic registration

Academic registration is carried out to obtain permission to participate in academic activities. Academic registration requirements are as follows:

1. Registration is carried out at the Sub Division of Education (SBP) of the Faculty of Pharmacy by submitting proof of BPP payment or BPP Deferral Approval Letter;
2. Students are required to take a Study Plan Card (KRS), fill it out with the guardian lecturer.
3. After being signed by the student and guardian lecturer, KRS is submitted to the SBP according to the predetermined schedule.
4. Students will not receive any academic services as long as they are not registered in the current semester.

3.3 Cards and Lists

Several cards and lists are used in academic administration, including:

3.3.1 Study Plan Card (KRS)

1. KRS contains a list of courses the student will take in the semester concerned.

2. KRS is filled in by the student and approved by the guardian lecturer by putting a signature.
3. KRS is taken at SBP no later than three days before lectures start at the beginning of each semester.
4. KRS is submitted to the SBP.

3.3.2 Change of Study Plan Card (PKRS)

With the approval of the guardian lecturer, students are allowed to modify KRS (replace, add, or subtract) up to 10 (ten) working days (2 weeks) from the start of lectures in semester concerned. After this limit, changes to the KRS are no longer allowed.

The revised KRS must be resubmitted to SBP no later than the end of the 2nd week of lecture.

3.3.3 Student and Lecturer Attendance List (DHMD)

1. DHMD contains the student name and student identification number (NPM) who is participating in the relevant course;
2. DHMD is signed by the student during the teaching and learning activities, as well as by the lecturer who teaches courses or assistants at the end of the activity;
3. DHMD is stored in SBP or by lecturer who teaches courses.
4. DHMD that is kept by the lecturer who teaches courses must be submitted to the SBP on the last day of lecture as an evaluation material for student attendance to be made DPNA.

3.3.4 List of Participants and Final Score (DPNA)

1. DPNA contains a list of names and NPMs of all students who take a course in accordance with DHMD;
2. DPNA is given by SBP to lecturer who teaches the course during the final semester exam and must be submitted back to the SBP no later than one week after the implementation of the course exam;
3. The original DPNA is kept in the SBP, the first copy is posted on the announcement board, and the second copy is kept by the lecturer who teaches the course.

3.3.5 Study Progress Card (KKS)

1. KKS contains the final score of all courses that the student has taken in the semester concerned and includes the maximum SKS load that can be taken in the following semester;
2. KKS issued by SBP of Faculty of Pharmacy;
3. KKS is used as a consideration for filling out KRS in the following semester;
4. KKS is made in 4 copies, namely for students, guardian lecturers, SBP, and study program.

3.3.6 List of Student Achievements (DPM)

1. DPM contains the final Grade Point Average (IPK) of students for each batch in one study program, the number of semesters and the study load that has been taken, as well as the name and code number of the

guardian lecturers. This DPM was made by SBP of Faculty of Pharmacy.

2. DPM is passed and signed by Deputy Dean I.
3. DPM is announced to students at the end of each semester.

3.3.7 Exam Participant Card (KPU)

Exam Participant Card (KPU) is a card used as student identity when taking the Final Semester Examination, KPU is obtained by students if has met the academic administration prerequisites to take the Final Semester Examination. The KPU issuance is adjusted to the needs of the Faculty of Pharmacy.

3.3.8 Student Study Card (KSM)

Student Study Card (KSM) is a card used as proof/contract of taking courses by students in each semester, issued by SBP of Faculty of Pharmacy after passing through the academic guidance/guardianship process. KSM issuance is adjusted to the needs of the Faculty of Pharmacy.

3.3.9 Academic Achievement Card (KPA)

Academic Achievement Card (KPA) is a card that contains the entire list of courses along with the grade of the courses that students have taken/contracted during their studies, which can also be referred to as

temporary academic transcripts or a collection of Study Progress Cards (KKS). The issuance of KPA is adjusted to the needs of the Faculty of Pharmacy.

3.4 Learning activities

1. Students are allowed to take part in learning activities if they have:
 - a. Had a Student Identity Card (KTM) that is valid in the semester concerned.
 - b. Filled in the KRS for the semester concerned and it has been signed by the student, guardian lecturer, and SBP.
 - c. Registered in the DHMD of the semester concerned.
2. When participating in learning activities, students must sign DHMD and must be checked by the lecturer who teaches the course.
3. In an effort to evaluate and monitor learning outcomes, there are Mid-Semester Exam (UTS), End Semester Exam (UAS), and Computer Based Test (CBT). CBT exams are conducted 3 times, namely before starting the first year of study (CBT 1, basic knowledge mapping), before clinical practice in each semester (Thematic CBT 2, 3, and 4), and before the Thesis Exam (CBT 5). Points to consider regarding the CBT exam:

- Students are declared successful in implementing CBT if the CBT score is above 56.
- Students who get CBT scores below 56 must perform CBT remedial for a maximum of 2 times.
- If after 2 repetitions still get a score below 56, then the student must receive special treatment (tutoring from the supervisor for CBT 1; tutoring from the related lecturer for CBT 2, 3, and 4; and given a maximum time of 1 month to repeat the CBT for CBT 5 and can conduct a trial).

3.5 Exam Requirements

Students are allowed to take the exam if they have met the requirements below:

1. Registered as a student in the semester concerned.
2. Meet all administrative requirements set by the Faculty of Pharmacy.
3. Participating in at least 80% of lecture activities in real terms held in the semester concerned and/or participating in all activities (100%) of laboratory practicum, field work, clinical work, seminars, or similar activities.
4. To take a comprehensive trial, students must meet the following requirements:
 - a. Pass all courses in the study program taken (meet the required cumulative study load).
 - b. Has compiled and written a thesis and passed a research result seminar
 - c. Has completed the administrative requirements set by the University and the Faculty of Pharmacy.
 - d. Pass the CBT pre-Thesis Exam.

3.6 Thesis

3.6.1 Thesis Writing

At the end of the Pharmacy Masters Study Program, students are required to make a thesis in the form of research which is divided into 2 credits (0-2) of research proposal 2 credits (0-2) of research and thesis paper examination (including thesis preparation), and 3 credits (0-3) of thesis examination.

1. Thesis is the final scientific work made by Master's Study Program student, made based on the research results using applicable scientific methods and principles.
2. A thesis is a student's original scientific work which is indicated by a stamped statement regarding its authenticity.
3. It is hoped that the proof of the authenticity of the thesis will be done using anti-plagiarism software.
4. The thesis has the same position as other courses, but has a different form in the learning process, as well as the method of assessment.
5. The weight of the thesis is set at 9 (nine) credits which are divided into research proposal seminars, progress reports 1, research results seminars, progress reports 2 and comprehensive trial.
6. Thesis writing as a final project at the Postgraduate level in Unpad is carried out based on these guidelines.
7. Thesis writing structure and style, such as outline, citation writing, notes (footnote or running note),

bibliography, following thesis writing guidelines applicable at the Faculty of Pharmacy of Unpad.

3.6.2 Research Proposal Seminar (SUP)

Students can take the Research Proposal Seminar course, if:

1. Have a Student Identity Card (KTM) that is valid for the semester concerned.
2. Have a KRS that includes a Research Proposal Seminar as one of the courses.
3. Register to SBP by including research interests.

SUP is a student research plan for the preparation of a thesis, namely:

1. SUP can be implemented in the first semester on the condition that student has passed the research methodology course and it will be carried out no later than the end of semester III (three), if not or it has not been implemented then the student concerned is considered to have resigned.
2. The SUP Discussion Team consists of at least 2 (two) members of Advisor Team, 3 (three) members of Examination Team, and is led by 1 (one) SUP Leader.
3. Students take SUP at predetermined times, and the research proposal manuscripts (UP) must have been bound by transparent mica (white), and submitted to the SUP leader, Advisory Team and Examination Team at least 1 (one) week before SUP implementation.

4. SUP is carried out in a panel and attended by at least 3 (three) discussants, consisting of 1 (one) or 2 (two) Advisory Team and 1 (one) or 2 (two) Examination Team members plus 1 (one) SUP Leader.
5. Leader of SUP is the Head of the Masters Study Program or the Head of Supervisor, which is determined based on the Faculty Dean's Decree on behalf of the Rector
6. The leader of the SUP does not automatically act as a discussant, except in accordance with the student's field of science being tested or as the Head of the Advisory Team;
7. SUP is conducted openly and can be attended by students and lecturers.
8. Students who do not pass SUP, are given the opportunity to repeat SUP 1 (one) time, which is held no later than 3 (three) months after the first SUP. Study termination sanctions will be given, if the student is declared to have not passed SUP for the second time.
9. In SUP, discussants evaluate the contents of the research proposal, ask questions and evaluate the answers given by students, and provide suggestions for improvement of the research proposal.
10. Assessment on SUP is given in the form of a raw score in the range of 0-100.

In SUP, discussants evaluate the accountability of students for questions that are critical and clarify

towards the research proposal material/substance with a weight of assessment :

- a. Significance of Research Background and/or Research Focus, and Problem Formulation, weight 15% (fifteen percent);
- b. Relevance and up-to-date of the Literature Review, weight 25% (twenty five percent);
- c. The accuracy of the formulation of Thinking Framework and Research Proposition /Hypothesis, weight 10% (ten percent);
- d. Suitability of Research Methods, weight 10% (ten percent);
- e. Scientific writing skills, weight 20% (twenty percent);
- f. Communication skills in oral examinations, weight 20% (twenty percent).
- g. The weight of the 100% (one hundred percent) assessment above can be added to the weight of the assessment of 10% (ten percent)

At the end of the SUP, the discussant/reviewer gives the following assessment:

- a. students are declared to have passed if they get an average score of ≥ 68 ;
- b. students are deemed not to pass if they get an average value <68 .

Final score (NA)	HM	(AM)
$\leq NA \leq 100$	A	4
$\leq NA < 80$	B	3
$\leq NA < 68$	C	2

≤ NA < 56	D	1
< 45	E	0

Convert final score into HM and AM using the following guidelines:

3.6.3 Research Results Seminar (SHP)

Students can take the Research Results Seminar course if they have completed all the provisions in the Research Proposal Seminar course and progress reports.

If the research cannot be completed in one semester, then:

1. Students are still allowed to complete it in the following semester, by re-entering the Research Results Seminar course on KRS (research topic and supervisor remains the same).
2. At the end of the semester concerned, the subject is given the letter K, so it is not used for calculating GPA and final GPA.

If the thesis cannot be completed in two consecutive semesters, then:

1. The Research Result Seminar course is given the letter E, except in certain cases which can be accounted for academically.
2. Students are required to take the research again with a different title (supervisor can change or the same).

Examinations are carried out on research result material in a Research Results Seminar. The requirements for conducting research seminars are:

1. Submit a letter of recommendation from the supervisor
2. Submit proof of revisions to the research proposal draft in accordance with the suggestions from examiners and supervisors signed by the study program
3. Submit a scientific publication evidence sheet
4. Submit a thesis statement with a stamp of Rp. 6000
5. Submit academic achievement card that has been signed by the Head of Study Program
6. Library-free statement letter for Post Unpad library, Cisral Unpad and Faculty of Pharmacy
7. Laboratory free letter (for those who conduct research in the laboratory)
8. The latest TOEFL test result certificate that is still valid
9. Completing administrative requirements set by the faculty and university.
10. The research result seminar shall be held at least three months after the research proposal seminar.

In SHP, discussants evaluate the accountability of students for questions that are critical and clarify towards the research result material/substance with a weight of assessment :

- a. Significance of Research Background and/or Research Focus, and Problem Formulation, weight 15% (fifteen percent);
- b. Relevance and up-to-date of the Literature Review, weight 25% (twenty five percent);

- c. The accuracy of the formulation of Thinking Framework and Research Proposition /Hypothesis, weight 10% (ten percent);
- d. Suitability of Research Methods, weight 10% (ten percent);
- e. Scientific writing skills, weight 20% (twenty percent);
- f. Communication skills in oral examinations, weight 20% (twenty percent).
- g. The weight of the 100% (one hundred percent) assessment above can be added to the weight of the assessment of 10% (ten percent)

At the end of the SHP, the discussant / reviewer gives the following assessment:

- a. students are declared to have passed if they get an average score of ≥ 68 ;
- b. students are deemed not to pass if they get an average value <68 .

Convert final score into HM and AM using the following guidelines:

Final Score (NA)	HM	AM
$80 \leq NA \leq 100$	A	4
$68 \leq NA < 80$	B	3
$56 \leq NA < 68$	C	2
$45 \leq NA < 56$	D	1
$NA < 45$	E	0

3.6.4 Research and Writing Scientific Articles

1. Research is carried out after students pass SUP and have made improvements to the research proposal and approved by the Advisory Team.
2. During the lecture period and after SUP, students write scientific papers according to the theme of SUP research as one of the requirements for graduation. The scientific works can be in the form of:
 - a. Scientific articles in the form of writings that are part of the thesis, as the first author who must include the names of the supervisors who will act as co-authors, by including Unpad institutions, in reputable international journals or international journals with ISSN in accordance with applicable regulations in Unpad environment;
 - b. Scientific articles in the form of writing that are part of the thesis, as the first author who must include the names of the supervisors who will act as co-authors, by including the Unpad institution, in accredited national journals at least Sinta 3 accredited in accordance with applicable regulations in the environment Unpad;
3. With the guidance and direction of the Advisory Team (Chairperson and Members), students write 1 (one) scientific article with a topic that is in accordance with thesis research (according to the research theme that has been tested in SUP) to be published in reputable international journals and/or an accredited national journal

4. Students who can submit their research results to international journals at least Q4 Scopus, obtain LoA (Letter of Acceptance), and submit proof of review no longer need to conduct research results seminars but still have to conduct a comprehensive trial.
5. Students submit scientific articles to reputable international scientific journals and/or accredited national journals with the approval of the supervisors who will act as co-authors, including the Unpad institution.
6. Especially for students whose 1 (one) scientific article is accepted or published in a reputable international journal of at least Q3 Scopus, as evidenced by a letter of acceptance from the reputable international journal publisher (written during their Masters Program and according to the research theme that has been tested in the SUP), in accordance with the applicable provisions in Unpad, the student concerned is given an assessment with the grade A for the research result seminar course while still being required to write a thesis that is adjusted to the scientific article.

Linkage of Thesis with Scientific Articles

- a. Students write a thesis manuscript in accordance with UP and based on research results published as scientific articles;
- b. One of the research sub-topics, produces 1 (one) scientific article with a certain “sub-topic / issue” that is in accordance with the research theme/topic during SUP;

1. Thesis research topic (X), consisting of (can be divided into) several sub-topics X1, and Xn;
2. Research sub-topics X1, producing scientific articles in reputable international journals/ accredited national journals/ ISSN national journals/seminar proceedings with “topics/issues” X1;
3. Xn research sub-topics, producing scientific articles in reputable international journals/ accredited national journals/ISSN national journals / seminar proceedings with Xn "topics/issues";
4. The synthesis of the three researches can produce one scientific article in a reputable international journal/accredited national journal;
5. Written scientific articles (X1, Xn), their ideas are derivatives of the main ideas contained in X.

3.6.5 Thesis

1. General
 - a. Masters Program students can take the examination in the form of a comprehensive trial according to their respective concentrations if they meet the following requirements:
 - 1) Has passed all courses with a final GPA of at least 3.00;
 - 2) Has implemented SUP and is declared passed; and the thesis paper has been tested in a research results seminar (SHP)
 - 3) The thesis paper has been approved by the Advisory Team;
 - 4) Submit a Letter of evidence of published scientific articles (written while attending Masters Program)

- b. Before the comprehensive trial, students must first pass the Research Results Seminar;
 - c. Before the trial, the Advisory Team evaluates the material/substance of the manuscript submitted through the Research Results Seminar (SHP) which is managed by the Study Program;
 - d. Thesis examination material is a comprehensive trial according to the student's research topic and the concentration of each student
 - e. The Head of the trial is the Head of the Masters Study Program or the Head of Advisor Team;
 - f. The trial discussion team consists of at least 2 (two) members of Advisory Teams and 3 (three) examiners;
 - g. Students attend the trial at the appointed time, and the thesis manuscript must be bound in yellow soft cover, and submitted to the Head of the trial, the Advisory Team and the Examining Team at least 1 (one) week before the implementation of the Thesis Examination (UT);
 - h. The Head of the trial is not automatically act as a discussant, except in accordance with the student's field of science being tested or as the Head of Advisor Team.
2. Thesis Examination (UT)
- a. UT is carried out in a panel and attended by at least 3 (three) discussants, consisting of 1 (one) or 2 (two) members of Advisory Team and 1 (one) or 2 (two) members of Examination Team and added 1 (one) UT Leaders;
 - b. The Examination Team at the stipulated SHP time must be the same as the SUP Examination Team;

c. In UT, discussants evaluate the content of the thesis manuscript with a weight of assessment:

- 1) Significance of Research Background and/or Research Focus, and Problem Formulation, weight 10% (ten percent);
- 2) Relevance and up-to-date of Literature Review, weight 20% (twenty percent);
- 3) Accuracy of the formulation of Thinking Framework and Research Proposition/Hypothesis, weight 10% (ten percent);
- 4) Suitability of Research Methods, weight 10% (ten percent);
- 5) Sharpness of analysis and wholeness of thought, weight 20% (twenty percent);
- 6) Stability and quality of the conclusions, as well as the suggestions submitted, weight 10% (ten percent);
- 7) Scientific writing skills, weight 10% (ten percent);
- 8) Communication skills in the oral exam, weight 10% (ten percent).

The weight of the 100% (one hundred percent) assessment above can be added to the weight of the assessment of 10% (ten percent) assessment below, if students can show a contribution to the growth of science, technology, and developments.

- d. Assessment on UT is given in the form of a raw score in the range of 0-100
- e. At the end of the UT, the discussant gives the following assessment:
 1. students are declared to have passed if they get an average score of ≥ 68 ;
 2. students are deemed not to pass if they get an average value <68 .
- f. The score of the discussant is added up by the percentage of the Advisory Team of 60% (sixty

- percent) and the Examination Team 40% (forty percent) as NA, without first being converted into HM;
- g. Conversion of final score into HM and AM using the following guidelines:

Final Score (NA)	HM	AM
$80 \leq NA \leq 100$	A	4
$68 \leq NA < 80$	B	3
$56 \leq NA < 68$	C	2
$45 \leq NA < 56$	D	1
$NA < 45$	E	0

- h. Students who do not pass the SHP, are given the opportunity to take 1 (one) repeat SHP within the agreed time period, taking into account the study time limit

3.6.6 Graduation Predicate

The graduation judgement is based on the final GPA, which is the combined average of Grade Number of courses with the Grade Number of comprehensive trial, as follows:

Quality Score	Yudisium
3,00 - 3,50	Satisfactory
3,51 - 3,75	Very satisfactory
3,76 – 4,00	Praise (with additional conditions)

The predicate of graduation "Praise", has other additional requirements, namely:

1. Time of graduation from Master Program (Comprehensive session date date) takes into account the scheduled study period plus 1 (one) semester (0.5 years) or a maximum of 5 (five) semesters;
2. Has had at least 1 (one) scientific article with an accepted status in a reputable international journal or in a national journal accredited Sinta 2;
3. There are no courses with a C grade;
4. Students who meet the "Praise" judicium, but do not meet the additional requirements in accordance with point 3.6.6, then the graduation judicium is only determined as "Very Satisfactory".
5. I. Students who can submit their research results to at least Q4 international journals, obtain LoA (Letter of Acceptance) and submit proof of review are no longer need to conduct research seminars but still have to conduct a comprehensive session.

3.7 Evaluation of Learning Outcomes

The final grade of a course obtained by students is stated in two forms, namely the Grade Letter and the Grade Number according to the UNPAD assessment guidelines, which are divided into the following grade:

Grade Letter	Grade Number
A	4
B	3
C	2
D	1
E	0

A student is declared to obtain the **letter T** if:

1. Have not participated in the final examination of the semester;
2. After the item (1) is fulfilled by the student within 2 weeks from the final exam for the subject concerned, the letter T must be replaced with grades A, B, C, D, or E;
3. If the evaluation in item (1) is not fulfilled within the time limit of 2 weeks, then the grade becomes E, or the lecturer who teaches the subject can process it according to the weight of each assigned evaluation section, resulting in another grade (HM);
4. The letter T cannot be changed to the letter K, unless the student is unable to take the follow-up final exam based on justifiable reasons (illness, accident, or an accident requiring long treatment).

A course can be stated with the **letter K** if:

1. Students resign from lectures after the KRS change deadline (2 weeks after the academic activity runs) with reasons that can be justified and proven by a Dean's Statement Letter.

2. Students cannot take the final semester exams.
3. Students cannot complete the final project in one semester.
4. Students do not participate in learning activities for a long period because of illness, or have an accident accompanied by a statement letter from the authorities.
5. Subjects that have the letter K are not used for calculating GPA or final GPA.
6. For students who get the letter K for the entire study load in the semester concerned, this is counted towards the study time limit and is not considered a temporary termination of study.
7. The K value can change to A, B, C, D, or E after attending course again.

Assessment of students' mastery of material in all programs (either cognitive, psychomotor, and affective) uses PAP (Benchmark Assessment) with the following criteria:

Range	Grade's Letter	Grade's Number
$NA \geq 80$	A	4
$68 \leq NA < 80$	B	3
$56 \leq NA < 68$	C	2
$45 \leq NA < 56$	D	1
$NA < 45$	E	0

3.7.1 Grade Point Average (IP)

1. Grade Point Average (IP) is a number that shows the achievement or progress of student learning in one semester.
2. IP is calculated at the end of each semester.
3. The calculation formula is as follows (rounding down if less than 0.05, rounding up if equal / more than 0.05).

$$\text{IP} = \frac{\text{Total (Grade Number x Credits)}}{\text{Number of credits}}$$

3.7.2 Final Grade Point Average (IPK)

1. The Final Grade Point Average (IPK) is a number that shows a student's cumulative learning achievement or progress from the first semester to the last semester that has been taken.
2. GPA is calculated at the end of each semester.
3. The calculation formula is as follows (rounding down if less than 0.05, rounding up if equal / more than 0.05):

$$\text{GPA} = \frac{\text{Amount (Grade Number x Credits) of all semesters taken}}{\text{The number of credits of all semesters taken}}$$

1. Final GPA is used to determine the study load of the following semester.

2. The range of GPA and the maximum number of credits a student can take in the following semester (according to the Unpad assessment guidelines).

Range of IPK	Maximum number of SKS can be taken
3,00 – 4,00	24
2,50 – 2,99	21
2,00 – 2,49	18
1,50 – 1,99	15
< 1,50	< 12

3. GPA and final GPA are used as criteria for giving academic sanctions and evaluation of studies at the end of the program.
4. Students are allowed to take a semester study load less than the minimum allowable amount, but are not allowed to take a semester study load that is greater than the maximum amount allowed.
5. If students improve the grade of E, D, or C, in calculating the GPA the higher grade will be used, for example: E is fixed to D, grade D will be selected.
6. The letters T and K are not used in calculating the IPK. The letter T must be changed to A, B, C, D, or E within two weeks after the letter T is announced.

3.7.3 Improvement of Grade

Improvement of grade can be carried out in the regular semester (odd semester and even semester).

1. Grade E must be corrected by taking the subject again in the following semester or at the first opportunity
2. The grade used for the calculation of IP and IPK is the last grade obtained.

3.7.4 Total of Grade D

Students in the Master of Pharmacy Study Program are not allowed to have grade D. Termination of study can be done if at the end of semester I (one) and semester II (two) they get a grade below C

3.8 Guidance and Counseling

Guidance and Counseling aims to provide guidance and counseling assistance to Padjadjaran University students who have problems, both academic and non-academic in order to be able to overcome the problems they are facing, and to develop their abilities and self-understanding in an effort to complete their studies.

Guidance and Counseling service procedures are as follows:

1. Students can come to the faculty counselor lecturer on their own or based on advice from guardian lecturer. The guardian lecturer will give a cover letter to the counselor lecturer.
2. Student services at the University TPBK are only permitted on the basis of the consideration of the Faculty Leaders who will provide a cover letter, except in certain circumstances deemed emergency.

3. Services for students who are recommended to conduct study program transfer, the following procedures apply:
 - a. Submit a letter of application from students/parents/guardians to get guidance and counseling services.
 - b. Include the academic transcript of the student concerned.
 - c. Submitting a cover letter for the application of "Psychological Test" on behalf of the student concerned from the Head of the Faculty (Dean / Vice Dean I)/University Leaders (Rector / Vice Rector I) to University TPBK
 - d. The findings and results of the "Psychological Test" on behalf of the student concerned are from the University TPBK

To help students learning process, the Faculty of Pharmacy assigns a guardian lecturer who will guide students while studying in the Master of Pharmacy Program. The number of students supervised by certain guardian lecturers is adjusted to the ability of the Faculty of Pharmacy with the following conditions:

1. Basically, each teacher can be a guardian lecturer who guides students for the entire program.
2. Guardian lecturers are required to keep in touch with students periodically to monitor the progress of their studies, at least at the beginning, middle, and end of the semester; Guardian lecturers are required to have, fill in, and keep a Student Information File (BIM) book, both for the purposes of academic guidance and personal guidance.

In brief, the tasks of guardian lecturers are:

1. Helping students prepare a study plan, either a full study program or a semester program.
2. Give consideration to the student's guidance in determining the study load and types of courses to be taken, according to the final GPA obtained in the previous semester.
3. Monitoring the progress of the student's studies under his supervision.

At the beginning of the semester, the guardian lecturer holds a meeting with students to discuss the study plan of the entire program being taken. The things discussed are:

1. The estimated number of semesters a student will take to complete the entire program.
2. Direction of student studies.

The things that need to be considered in determining course taking are:

1. A course that is a prerequisite for the next course.
2. Courses that are only presented in one semester (odd semester or even semester only) or presented each semester.
3. SKS weight for courses, with the understanding that the bigger the SKS weight, the heavier it will be.
4. Different forms of subjects (lectures, laboratory labs, seminars, clinical practicums, etc.) with different number of hours of learning activities.
5. Minimum attendance requirement is 100% in laboratory lab work and 80% in lectures (20% absence must be accompanied by a justifiable reason).
6. Semester study load, because if it is too much it can cause a low GPA which can reduce final GPA. This will

determine the semester study load that can be taken in the following semester.

7. Elective courses available in the study program.

After discussing the study plan for the whole program, it is followed by the semester I study plan. Basically for the first semester each student is given the same opportunity, namely 21 credits.

1. Students fill in KRS with the approval of the guardian lecturer. The guardian lecturer gives considerations and suggestions for taking the semester's study load based on the current final GPA as a guideline, in addition to improving the overall study plan of the program by signing and stating their agreement with students;
2. The semester study load does not have to be the maximum number of credits allowed on the basis of the current final GPA, especially if the courses to be taken include research activities and thesis writing or clinical and field activities (1 credit = 4-5 hours), because of the number of hours learning activities will be greater than lecture activities (1 credit = 50 minutes face to face and 60 minutes unscheduled structured activities, 60 minutes for independent activities).
3. Guardian lecturers must pay attention to the number of grade D obtained by students so as not to exceed the applicable provisions at the end of the entire program (not to exceed 20% of the cumulative study load).
4. Certain personal difficulties can be accommodated by guardian lecturers, but if they cannot be resolved, it is advisable to be referred to the counselor lecturer at the Faculty of Pharmacy.
5. In the event that the guardian lecturer is unable to carry out his/her duties for a long time, the Head of the Faculty of Pharmacy is obliged to appoint a replacement

3.9 Temporary Discontinuation of the Study

Students can temporarily stop their studies with the Dean's Permission by referring to the following conditions:

1. The maximum number of study suspension is two semesters, either consecutively or separately.
2. The mechanism for applying for a temporary study termination permit :
 - a. Students submit a letter of application to the Head of the Study Program, which is known by the Guardian Lecturer /Academic Advisor by affixing a signature.
 - b. Application letters are submitted no later than 2 (two) weeks after lecture activities.
 - c. After considering the academic aspect (final GPA and the amount of credit savings), the Head of the Study Program forwards the application to the Dean.
 - d. If you get the Dean's permission, then during the study suspension period, students are exempt from the BPP.
 - e. Study suspension is not taken into account within the maximum time limit for a student's study period.
 - f. Students who get permission to suspend their studies are not entitled to academic services.
3. Temporary study suspension without the permission of the Dean, will be subject to the following sanctions:
 - a. To re-register must submit a written application to the Rector, through the Dean.
 - b. The study suspension period without the Dean's permission is calculated within the maximum time limit for the study program.

- c. Pay tuition fees and practicum fees payable, and for the next semester payments are charged according to the new student rate.
4. Stopping studies for two semesters consecutively or separately, with the reasons as mentioned in point 3 (2) after the previous semester obtained the letter K for all semester expenses, it is deemed to temporarily suspend studies with the permission of the Dean for two semesters; thus the student is no longer allowed to temporarily stop his studies.
5. The study suspension should not be carried out temporarily on:
 - a. Semester I, and/or
 - b. Semester II, and / or
 - c. One and / or two semesters before the study deadline. Thus, students are not allowed to temporarily stop their studies, either with or without permission in semester XIII and / or semester XIV. Students who temporarily stop their studies without permission in the above semesters are considered to have withdrawn.

3.10 Graduation and Academic Degrees

1. Masters Program students who have passed will receive a Graduation Letter (if required), Academic Transcript, and Master's Certificate, if: Submit hard and soft copies of the thesis no later than 1 (one) month if the correction is minor and 3 (three) month

if the correction is major; and Submitting a cover letter that has completed the administration of the Master Study Program.

2. Graduates can attend graduation if they have fulfilled the obligations as stated in point 1.
3. Master's Certificate and Academic Transcripts will be given no later than 1 (one) week after graduation at the Unpad Integrated Service Center.
4. Graduates of the Masters in Clinical Pharmacy Study Program are given the right to use the academic title of Master of Pharmacy (M.Farm.)

CHAPTER IV ACADEMIC SANCTIONS

Academic sanctions can be in the form of academic warnings and/or termination of studies. The study termination sanction is proposed by the study program/faculty and decided by the Rector.

4.1 Academic Warning

Academic warning is in the form of a letter from the Vice Dean addressed to parents/ guardians or funding institutions to inform student's lack of academic achievement or violations of other provisions. Academic warning is carried out to warn the student in order to not to experience the termination of study.

Academic warning is imposed on students who at the end of the second semester and the semesters thereafter have a GPA below 2.00 and / or the amount of credit savings is less than 50% of the total credits that should be taken.

4.1.1 Academic Warning Due to Administrative Negligence

Academic warning is imposed on students of the Master of Pharmacy Study Program who neglect administrative obligations (not registering / re-registration, etc.) for one semester.

4.2 Study Termination

With the stipulation of termination of study, it means that students are expelled from Universitas Padjadjaran because their performance does not comply with applicable regulations, administrative negligence, and/or negligence in participating in learning activities. Reports

on student conditions who must be given an academic warning as a result of negligence, attached with the proof of academic achievement and/or evidence of negligence.

1. A warning letter to the student concerned from the Faculty Leader (Dean/Vice Dean)
2. A letter requesting consideration of students who have violated the law from the Faculty Leader (Dean /Vice Dean) to the Faculty Senate.
3. The decree violate /does not violate the law on behalf of the student concerned from the Faculty Senate
4. A letter of application for termination of study on behalf of the student concerned from the Faculty Leader (Dean / Vice Dean) to the University Leaders (Rector / Vice Rector I)
5. Letter of approval / rejection of the study termination of the student concerned from the University Leadership (Rector / Vice Rector I)
6. Academic transcripts that have been taken by the student while studying at Universitas Padjadjaran, signed by the Head of the Faculty (Dean/Vice Dean)

Study termination is imposed on students who experience one of the conditions that exceeds the set cumulative study time limit.

4.2.1 Termination of Study Due to Administrative Negligence

Termination of study is imposed on students of the Pharmacy Masters Study Program who stop their studies for two consecutive semesters or at different times without the permission of the Rector.

4.2.2 Termination of Study due to Failure to Participate in Teaching and Learning Activities

Termination of study is imposed on the Master of Pharmacy Study Program that has registered or re-registered administratively, but:

1. at the end of semester II (two) obtains a GPA below 3.00;
2. at the end of semester I (one) and semester II (two) obtain a letter of quality below C;
3. at the end of semester III (three) has not conducted a Seminar of Research Proposal or has not passed a Seminar of Research Proposal for the second time;
4. at the end of semester VIII (eight) cannot complete the study;
5. at the end of semester VIII (eight) does not or does not have scientific articles according to the graduation requirements;
6. for 2 (two) consecutive semesters or at different times do not register;
7. doing things that defame the good name of the alma mater (Unpad), commit plagiarism, and / or violate scientific ethics.

4.3 Other Academic Sanctions

1. Academic sanctions are imposed on students who commit disrespectful actions in the teaching-learning process, both academic and non-academic, or violate the law, and / or commit immoral acts.
2. The determination of academic sanctions for certain cases (data plagiarism, discussion plagiarism, not mentioning sources, norms and ethics) is determined based on a recommendation from the Faculty / Graduate School Team.

3. The handling of plagiarism cases refers to the applicable regulations in Unpad and the prevailing laws and regulations.
4. The types of academic sanctions are determined based on the prevailing laws and regulations by the Advisory Commission, which consists of:
 - a. University representatives (Rector / Vice Rector for Academic and Student Affairs / Director of Education and Student Affairs); and
 - b. Representatives of Masters Education administering institutions (Dean of the Faculty / Postgraduate School, Deputy Dean, Chairperson / Secretary of the Masters Study Program, and Chief Advisor).
5. The results of the Advisory Commission agreement are then followed up by signing the Minutes as the basis for determining the decision.

4.3.1 Not completing KRS and not participating in Teaching and Learning Activities in Semester I and / or Semester II

Students who have registered administratively in semester I and / or semester II, either filling in KRS but not participating in teaching-learning activities or not completing KRS at all, without justifiable reasons, are considered resigned and subject to study termination sanctions.

4.3.2 Not Filling KRS

Students who have registered or re-registered administratively, but do not complete KRS (do not participate in teaching and learning activities) without

justifiable reasons, are subject to the following sanctions:

1. Given a stern written warning by WD I not to repeat;
2. The semester left is calculated within the maximum time limit for completion of the study;
3. If this action is repeated, either in the following semester or in another semester, students will be subject to study termination sanctions.

4.3.3 Resign After the Change of KRS

Students who withdraw from one or more courses after the KRS change deadline without a justifiable reason (for example, illness, accident, or accident) are subject to the following academic sanctions:

1. The courses that are abandoned are declared not passing (given the letter quality E);
2. The letter E quality is used in calculating the Grade Point Average (GPA);
3. Got a warning letter from Vice Dean to not repeat.
4. The abandoned semester is calculated within the maximum time limit for completion of the study;
5. If this action is repeated, either in the following semester or in another semester, students will be subject to termination of their studies

4.4 Sanctions for Non Academic Violations

If a student commits a violation, after discussing it with the Faculty Senate, he will be subject to special sanctions, while the handling of criminal matters will be left to the authorities. The types of violations are like:

1. **Violation of Law**

Students who violate the law are subject to special sanctions in the form of academic suspension during the legal process, after being discussed with the Faculty Senate, while criminal matters are handed over to the authorities. Students who violate the law and have been legally found guilty by a court that has permanent legal force, will be subject to sanctions in the form of termination of study by the Rector. in accordance with applicable regulations.

2. Violation of Moral Ethics and Professional Ethics

Students who violate moral, professional ethics (examining patients / clients without supervision, making prescriptions, conducting consultations without supervision, etc.), falsifying signatures and the like, will be subject to sanctions in the form of suspension by the Dean until termination of studies by the Rector.

3. Violation of Academic Ethics

Students who violate academic ethics, including cheating, plagiarizing (papers, reports, Final Project Reports, Thesis, etc.), plagiarism, leaking questions or similar, will be subject to sanctions in the form of academic suspension by the Dean until termination of studies by the Rector.

4.5 Other Sanctions

All activities that disturb public order and immoral acts in the campus environment are subject to sanctions in the form of warnings up to termination of studies.

Basically every student has the right to carry out various activities as part of the academic community, however, as in human life in general, it must be avoided from committing

actions that can be categorized as crimes. These actions include:

1. Brawls between students, whether carried out inside or outside the campus environment that cause damage to other people's property and / or injured victims. The perpetrator of an act that causes damage or a victim of injury may be subject to the provisions of Article 406 of the Criminal Code concerning the destruction of property and Article 351 of the Criminal Code concerning persecution. The provisions in Article 406 and Article 351 of the Criminal Code can also be imposed on demonstrations that are disorderly and cause riots resulting in damage to other people's property and / or injured victims.

2. Drinking alcohol, both inside and outside the campus environment that disturbs public security. The provision that can be imposed is Article 492 regarding public security breaches.

3. Using narcotics, either for yourself or giving narcotics to others both inside and outside the campus environment. The provisions that can be imposed are Article 84 and Article 85 of Law no. 22 of 1997 on Narcotics.

In certain cases, the faculty may issue its own decisions that do not conflict with the legal or regulatory provisions above.

CHAPTER V INFRASTRUCTURE

5.1 Facilities

The Faculty of Pharmacy Unpad provides complete, self-owned and adequate facilities to ensure the smooth running of the Tridharma of Higher Education, in order to produce graduates who meet the specified competencies.

The facilities available at the Faculty of Pharmacy Unpad consist of a collection of books, scientific journals (physical and electronic), internet access, computer facilities, notebooks, tablets, LCD projectors, printers, digital cameras, scanners and complete laboratory instruments. Internet network already uses optical fiber with a bandwidth of 84 Mbps. All academicians can easily access the internet, due to the availability of adequate access points in all areas in the Faculty of Pharmacy Unpad.

Several courses in the Pharmacy Masters Program have taken advantage of the e-learning program at Universitas Padjadjaran. This program uses Moodle open source and can be accessed at <http://elearning.unpad.ac.id/kuliahonline/>

PS Masters students can access library facilities on the Unpad campus at Jalan Dipati Ukur Bandung which since 2017 has moved to the Jatinangor campus. This library is known as CISRAL-Unpad or Center of Information Scientific Resources and Library of Universitas Padjadjaran. CISRAL has implemented a digital library since 2003 and to date has a collection of 200,000 (two hundred thousand) books. Another advantage of CISRAL UNPAD is the search for books using the Online Public Access Catalog (OPAC), namely the automated CISRAL book collection tracking system subscribing to electronic journals (e-journals) related to PSPA UNPAD. CISRAL also has facilities such as a Multi

Media room to be able to use the internet and access e-journals and e-books, which consists of: Sampoerna Corner room which provides reading books, internet facilities, TV, DVD and CD-Rom. There is a reading room (readingroom) and there is a computer and WiFi that can be used by users. Online access to the collections of the Universitas Padjadjaran library can be done through: Electronic Library (<http://lib.unpad.ac.id/>), Electronic Journal (<http://jurnal.unpad.ac.id/>), Knowledge Management (<http://repository.unpad.ac.id/>) and Online Public Access Catalog (OPAC) (Opac.unpad.ac.id). The central library of Universitas Padjadjaran has various facilities provided to make it easier for the academic community to access the library collections online. Apart from the university website as a vehicle for information, faculty websites were also developed. Until now, it has a book collection of around 200,000 (two hundred thousand) copies. There are various references available in the pharmacy faculty library which can be accessed online by the PSMF academic community including e-books and e-journals..

Another advantage of CISRAL Unpad is book search using the Online Public Access Catalog (OPAC), a book collection tracking system. CISRAL subscribes to an electronic journal (e-journal) which can be accessed by students of the Faculty of Pharmacy Unpad. In addition, CISRAL also subscribes to electronic books (e-books) in various fields of science. CISRAL also has facilities such as a multi-media room to access e-journals and e-books in the form of the Sampoerna Corner, which also provides books, TV, DVD and CD-Rom. At CISRAL, there is a reading room that provides computers and WiFi.

In addition to the facilities at the Faculty of Pharmacy, students also can access various facilities in the classroom, administration room, laboratory, laboratory center, meeting

room, sports facilities (badminton indoor sports hall, futsal field, soccer field, and basketball court), art activity room, activity room student affairs, health facilities, ATM platforms, bookstores, canteens, central library, mosque, Technical Implementation Unit (UPT) Medical & Health Center, Unpad Teaching Home (RSP), arboretum, on-campus transportation facilities and other facilities located on three campuses Unpad located in Bandung, Jatinangor and Arjasari.

Students can also access various facilities owned by other parties, such as the facilities at the Hospital dr. Hasan Sadikin Bandung, PT. Prodia Widya Husada and BATAN as well as facilities in various pharmacies, pharmaceutical industries, hospitals and government agencies (Balai POM and Puskesmas).

In the next five years, the Faculty of Pharmacy plans to increase the availability of various facilities, including the addition of laboratory instruments (HPLC, FTIR, UV spectrophotometer, densitometer, PCR, refrigerator, freeze dryer, dissolution device, SPE-vacuum and CO₂ incubator), additional equipment. at the Unpad Educational Pharmacy-Kimia Farma, adding office equipment (electronics and furniture), teaching equipment, adding library collections and increasing internet bandwidth.

The management information system and ICT (Information and Communication Technology) facilities used by the Faculty of Pharmacy Unpad are in the form of:

1. Hardware in the form of a computer connected via an intranet and the internet.
 - a. Cable network & hot spots covering all areas of the Faculty of Pharmacy, both inside and outside the building.
 - b. 3 servers
 - c. 143 personal computers, 39 notebooks, 9 tablets and 12 Hubs.

- d. The use of PABX as many as 16 points for direct communication services between divisions and between administrative rooms.
2. A sufficient number of licensed software
 - a. Licensed Windows Operating System and *Office Applications (Microsoft Certificate Agreement)*, plus *Open source* applications such as Linux
 - b. Otomigen X automation *software* and GDL 4.2 *Digital Library software* which are connected to the IDLN (*Indonesia Digital Library Network*) used in the Unpad Faculty of Pharmacy Library and can be accessed through <http://farmasi.unpad.ac.id/perpustakaan>
 - c. *Moodle E-learning* Universitas Padjadjaran for *e-learning* applications, can be accessed at <http://elearning.unpad.ac.id/kuliahonline/>
 - d. *Plagiaricek software*, is a student's thesis antiplagiarism *software*, which can be accessed via a LAN network.

SIAT (Integrated Academic Information System) <https://siat.unpad.ac.id/> was built to facilitate and integrate all systems related to academic information both in the fields of education and teaching, research, community service and other support. SIAT can be accessed via <https://siat.unpad.ac.id/index.php/login> (for operator login), <https://students.unpad.ac.id/> (for student login) and <https://staffs.unpad.ac.id/login> (for lecturer login). SIAT contains:

1. PACIS (Padjadjaran Academics Information System) <http://pacis.unpad.ac.id>
Application for processing academic data which includes data for new students and old students, the finance department and BAA (Academic Administration Bureau). The facilities there are:

- a. Student registration and registration.
 - b. Up date student status.
 - c. Student bio and profile.
 - d. Payment process (e-payment).
 - e. Online Graduation
2. Registration (<http://pendaftaran.unpad.ac.id>)
Application for online registration processing, which includes:
- a. Fill in participant biodata.
 - b. Checklist of required documents.
 - c. Announcement portal.
 - d. Download proof of registration.
3. Students (<http://students.unpad.ac.id/>)
This application was built as an information portal for Unpad students. The facilities contained in it are:
- a. Filling in student biodata (for up date).
 - b. Registration information and billing form.
 - c. Academic information.
 - d. KRS Online.
 - e. Academic calendar
 - f. Test scores
 - g. Class schedule and lecture
 - h. Evaluation of learning outcomes (questionnaire)
- This application was originally called the student portal with the address <http://mahasiswa.unpad.ac.id>, which has now changed to become student students.
4. e-Office (Padjadjaran Linked Mail)
<http://siat.unpad.ac.id/eoffice>
Application / system provided to process incoming and outgoing mail workflow in the Universitas Padjadjaran environment. The facilities provided include:
- a. Incoming Mail System.

- b. Outgoing Mail System.
 - c. Mail Tracking.
 - d. Document Management.
5. *SIMAK BMN (State Property Accounting Management Information System) is an off line reporting system for the use of state property.*
6. Online Alumni Database, is an online alumni database system that can be accessed through <http://farmasi.unpad.ac.id/data-alumni>.

SIAT has also been integrated with PDPT-DIKTI data (Higher Education Database) or <http://forlap.dikti.go.id> through a web service that is connected between Universitas Padjadjaran and Kemenristekdikti, to function as evaluation reporting on study programs each semester.

5.2 Infrastructure

The Faculty of Pharmacy Unpad provides complete, self-owned and adequate facilities to ensure the smooth running of the Tridharma of Higher Education, so as to produce graduates who meet the specified competencies.

In 2015, the infrastructure for the Faculty of Pharmacy Unpad was more complete with a grant from the IDB (Islamic Development Bank) in the form of 2 new buildings, complete with the facilities. This new 3-story building, which is named Laboratory Building 2, contains classrooms and laboratories, which are integrated with research rooms, discussion rooms and lecturers' workrooms. A new 2-story Dean building, contains rooms for faculty and study programs management, academic and administrative service rooms, small meeting rooms, plenary meeting rooms and other rooms needed to support the learning process, including an auditorium room for

larger events. The two buildings complement the Laboratory 1 Building, which consists of classrooms, tutorial rooms, CBT Center and laboratories, which are integrated with research rooms, discussion rooms and lecturers' workrooms.

Classrooms, tutorial rooms and discussion rooms are used for lecture activities. The tutorial room is used for lectures using the SCL learning method and student comprehensive sessions. The auditorium room is used for guest lectures, guest visits or as a paper-based examination room (Paper Based Test). The Computer Based Test (CBT) method was conducted at the CBT Center.

Various laboratories and dry laboratories (Teaching Dispensatory), student research workspaces are available for use by students. The spacious library room is equipped with an adequate reading room. Comfortable open space for study and discussion, canteen, BEM Kemafar room, music room with band and angklung equipment and sports field. A large vehicle parking lot can meet the parking needs of lecturers, students and guests. Unpad Faculty of Pharmacy has Unpad-Kimia Farma Educational Pharmacy, medicinal plant garden and Padjadjaran 3 Dormitory for first year students. The Faculty of Pharmacy Unpad also has a fostered village, namely in Cilayung Village, Jatinangor District, Sumedang Regency, as a place for routine community service implementation.

In addition to infrastructure at the Faculty of Pharmacy Unpad, students can also access various academic and administrative infrastructure, laboratories, laboratory centers, meeting rooms, sports infrastructure (badminton indoor sports hall, futsal field, football field, and basketball court), art activity room, student activity room. Health facilities, ATM platforms, bookstores, canteens, central libraries, mosques and the Technical Implementation Unit (UPT) of the Medical & Health Center which provides health services in the form of

Emergency Unit (UGD), doctoral practice, outpatient care, inpatient care and referral to a more complete hospital (generally the Hasan Sadikin Hospital). Universitas Padjadjaran also has Unpad Teaching Hospital (RSP), arboretum and other infrastructure located on three Unpad campuses located in Bandung, Jatinangor and Arjasari.

Unpad Faculty of Pharmacy students can also access various infrastructures owned by other parties, such as the facilities of dr. Hasan Sadikin Bandung, PT. Prodia Widya Husada and BATAN. In the next five years, there will be expansion of the CBT space.

CHAPTER VI RESEARCH, COMMUNITY SERVICE AND COOPERATION

6.1 Researches

Various researches by lecturers of the Pharmacy Masters Study Program at the Faculty of Pharmacy Unpad are funded from various sources. At the university level, there is ALG (Academic Leadership Program) research funding for professors and PUPT (Higher Education Excellence Research) funds. National scale research, such as Competitive Grants according to National Priorities, Foreign Cooperation Grants and International Publications, National Strategic Competitive Grants and Incentive Programs are funded by the Ministry of Research, Technology and Higher Education, the Ministry of Health and several private institutions. The amount of the grant varies depending on the qualifications of the researcher, the scale of the research and the final product produced. Research is generally carried out in groups involving lecturers, students and educational staff, which produce scientific publications, patents and commercial products.

All research activities in the Pharmacy Masters Study Program at the Faculty of Pharmacy Unpad are carried out in an integrated manner and in coordination with the Directorate of Research, Community Service and Innovation (DRPMI), Universitas Padjadjaran. Monitoring and evaluation of activities and reporting is carried out regularly by faculties, universities and funders to ensure the quality, relevance and productivity of activities.

Most of the research results from the academic community of the Pharmacy Masters Study Program at the Faculty of Pharmacy Unpad are used as materials for learning /

education and are applied in the community in the form of community service activities. The results of this research are also published in the form of scientific presentations or scientific articles in accredited national journals and reputable international journals. This is in accordance with the vision of the Master of Pharmacy Study Program at the Faculty of Pharmacy Unpad, namely "Becoming a Superior Study Program in the Implementation of Research-Based and International Competitive Masters in Pharmacy Education in 2024" and one of the points on its mission is "Organizing research-based master of pharmacy demands of the user community and international competitiveness". Research-based education and community service (Transformative Learning) are the hallmarks of Universitas Padjadjaran in organizing higher education tridharma activities.

Currently, the Faculty of Pharmacy Unpad has 4 scientific journals that are published regularly, namely "Farmaka" as a forum for publication of Unpad Faculty of Pharmacy students, "Indonesian Journal of Clinical Pharmacy I" as an accredited national scientific journal, "Indonesian Journal of Pharmaceutical, Science and Technology" as a publication. National scientific journals have not been accredited as well as international journals "Pharmacology and Clinical Pharmacy Research". Each journal has special personnel (lecturers and education staff) who are trained in professional journal management.

6.2 Community service

Service / community service activities for lecturers of the Pharmacy Masters Study Program at the Faculty of Pharmacy Unpad are funded by various sources, including from Unpad DIPA funds in the form of priority PPM (Community Service) funds and integrated KKNM-PPMD funds. Other sources of

funds come from the Ministry of Research and Technology in the form of grants (IbM Grants) and other institutions such as PT. Prodia, PT Kimia Farma and the West Java Provincial Health Office in the form of a cooperation fund.

The amount of funds from DIPA Unpad can fund outreach activities, training or simple demonstrations, while other sources of funds are able to fund entrepreneurship programs or application of research results for the community.

Various service / community service activities are applications of the research results of the Unpad Faculty of Pharmacy academic community, in accordance with the vision of the Unpad Faculty of Pharmacy Master of Pharmacy Study Program, namely "Becoming a Superior Study Program in Organizing International Competitive Research-Based Master of Pharmacy Education in 2024". This is also in accordance with one of the points on its mission, namely "To carry out community service by taking advantage of research results in the field of pharmacy". Research-based education and community service (Transformative Learning) are the hallmarks of Universitas Padjadjaran in organizing higher education tridharma activities.

The Faculty of Pharmacy Unpad has a fostered village, namely Cilayung Village, Jatinangor District, Sumedang Regency as a routine location for the implementation of services / community service from the academic community of the Faculty of Pharmacy Unpad.

All service / community service activities at the Faculty of Pharmacy Unpad are carried out in an integrated manner and in coordination with the Directorate of Research, Community Service and Innovation (DRPMI), Universitas Padjadjaran. Monitoring and evaluation of activities as well as reporting are carried out periodically by faculties, universities and funders to ensure the quality, relevance and productivity of activities.

6.3 Cooperation

To increase the quantity and quality of higher education tridharma activities, the Master of Pharmacy Study Program at the Faculty of Pharmacy, Universitas Padjadjaran has collaborated with various agencies, both at home and abroad. This collaboration is coordinated by the Research Manager, PPM, Innovation and Cooperation, Faculty of Pharmacy Unpad.

6.3.1 Cooperation in the Education Sector

In the field of education, the Pharmacy Masters Study Program at the Faculty of Pharmacy, Universitas Padjadjaran has collaborated with various universities that provide pharmacy education throughout Indonesia, which are members of the Indonesian Pharmacy Higher Education Association (APTFI). APTFI regularly holds meetings to improve the quality and standardization of pharmaceutical master's education in Indonesia.

The Pharmacy Masters Study Program, the Faculty of Pharmacy, collaborates with various universities abroad in the form of guest lectures, workshops and bench marking. The guest lectures and workshops that have been held involve teaching staff from Gunma University (Japan), Yonsei University (Korea) and Universiti Sains Malaysia (USM), Chiba University (Japan), National University of Singapore (Singapore).

Bench marking activities for several staff of the Pharmacy Faculty Master of Pharmacy Study Program have been carried out to various universities in Indonesia and abroad, such as the College of Pharmacy, Monash University (Australia).

Educational collaboration with institutions abroad has

provided opportunities for further study for lecturers and alumni of the Faculty of Pharmacy Unpad at universities where cooperation, lecturers in collaborating institutions become resource persons for public lectures, guest lectures, international workshops or seminars, organizing joint international seminars and student exchanges and lecturers. To improve the competence of graduates, the Pharmacy Faculty Master of Pharmacy Study Program has collaborated with the pharmaceutical industry, pharmaceutical wholesalers, government agencies and various pharmaceutical service facilities, such as pharmacies, hospitals and health centers, especially as presenters in public lectures, guest lectures, workshops and national / international seminars. The collaborating parties also provide feedback used for improvement and evaluation of curriculum and graduate competencies.

6.3.2 Research Cooperation

In the field of research, the Master of Pharmacy Study Program at the Faculty of Pharmacy Unpad has collaborated with various institutions at home and abroad. Research collaborations that have been established with various domestic agencies include LIPI, BPPT, BATAN, PT. Kimia Farma, PT. Prodia, PT. Jamu Borobudur, Darya Padma Enoes, PT Inertia Utama, PT Midix Graha Farma, PT Martina Berto, and various pharmaceutical service facilities, such as pharmacies, hospitals and health centers, especially as a place for student and lecturer research.

Research collaborations that have been established with various foreign agencies include:

1. *Post Doctoral Research* at Toyama Medical and Pharmaceutical University (Jepang).

2. *Joint Research* with Hohenheim Universitat (Stuttgart, Jerman).
3. *Joint Research* with University of the Phillipine (Manila, Filipina).
4. *Post Doctoral Research* at Department of Pharmacy and Biology Munich University (Jerman).
5. *Training Course* at Faculty of Agriculture Kyoto University (Jepang).
6. *Joint Research* with Osaka Prefecture University (Jepang).
7. *Post Doctoral Research* at Institut of Pharmacy – Ludwig Maximilliam (Munich, Jerman).
8. *Post Doctoral Research* at Department of Chemistry, University of Braunschweig (Jerman).
9. *Post Doctoral Research* at Freie Universitat Berlin – Jerman.
10. *Sandwich Research* with Yonsei University (Korea).
11. *Joint Research* with Graduate School of Medicine, Gunma University (Jepang).
12. *Sandwich Research* with INSA, Toulouse (Perancis).
13. *Joint Research* with Monash University, Australia.
14. *Joint Research* with Universiteit Twente
15. *Joint Research* with Vrije University
16. *Joint Research* with Universitas Pompeu Fabra Barcelona
17. *Joint Research* with Faculty of Science Leiden University
18. *Joint Research* with Chiang Mai University
19. *Joint Research* with China Pharmaceutical University
20. *Joint Research* with Vienna University
21. *Joint Research and double degree program* with Rutgers University the state of new jersey
22. *Joint Research* with Tsukuba University
23. *Joint Research* with Chiba University

- 24. *Joint Research* with Groningen University
- 25. *Joint Research* with Gloucestershire University

6.3.3 Cooperation in the Field of Community Service

In the field of community service, the Master of Pharmacy Study Program at the Faculty of Pharmacy Unpad provides services in the form of self-medication training, pap smear examinations and free medical examinations, in collaboration with PT. Prodia and PT. Kimia Farma. In addition, various health education activities were carried out in collaboration with BPJS and the Indonesian Ministry of Health.

To improve the quality of pharmaceutical care, the Pharmacy Master Study Program of the Faculty of Pharmacy has collaborated with the West Java Provincial Health Office in the form of clinical pharmacy training for health workers at health centers.

In 2005, the academic community of the Pharmacy Masters Study Program at the Faculty of Pharmacy participated in building the image of herbal medicine as a traditional Indonesian medicine, through the Traveling Exhibition on Jamu in 4 countries, namely Indonesia, the Netherlands, Singapore and Greece. This activity was held in collaboration with the National University of Singapore (Singapore), Leiden University (Netherlands), Maich University (Greece), Martha Tilaar Foundation and Bapak Anak Agung Gde Agung.

In 2010 and 2017, the Unpad Faculty of Pharmacy Master's Study Program held international seminars, expos and workshops on herbal medicine. In this activity, the community was introduced to the existence of herbal medicine as a traditional Indonesian medicine which has gone global.

Faculty of Pharmacy Unpad also has an Education Pharmacy, which collaborates with PT. Kimia Farma Apotek,

as a place for implementing education, research and community service for lecturers and students of the Faculty of Pharmacy.

The satisfaction statement of the collaborating parties was obtained from the feedback form and questionnaire provided by the Faculty of Pharmacy Unpad, either by email or given during direct visits.

CHAPTER VII STUDENT AND ALUMNI

7.1 Student

7.1.1 Student Development System

The main objective of student development in the Master of Pharmacy Study Program at the Faculty of Pharmacy Unpad is to support and endeavor to complement intracurricular activities with co-curricular activities, so that graduates have added value in the form of organizational experience, actualization and self-development, sensitivity to the surrounding environment and upholding the value of togetherness.

Since 2015, Students of the Pharmacy Masters Study Program have a forum to carry out student activities together with students of the Clinical Pharmacy Masters Study Program and the Doctoral Study Program in the Postgraduate Student Association of the Faculty of Pharmacy, Universitas Padjadjaran. Some of the activities that have been carried out in 2016 and 2017 are the provision of workshops "How to Publish in Accredited National Journals and Reputable International Journals" in collaboration with the Indonesian Clinical Pharmacy Journal and seminars and HPLC training for research. Apart from academic activities, postgraduate associations also regularly carry out sports and arts activities together with Kemafar.

7.2 Alumni

Universitas Padjadjaran Postgraduate Program alumni are gathered in the Unpad Postgraduate alumni association. One of the goals of the establishment of this alumni association is

to provide input to the study programs, especially in the curriculum, in order to be more applicable and in accordance with the actual situation in the field.

Consequently, alumni of the master of pharmacy study program is member of the Faculty of Pharmacy Unpad alumni association, which are not separated from the postgraduate alumni association. To date, there are 4000 alumni registered at the Faculty, who are spread across the nation. The Alumni Association, embodied in the **Alumni Association of the Faculty of Pharmacy** as part of the **Alumni Association (IKA) Universitas Padjadjaran**. This association is a forum for all alumni, both undergraduate, pharmacists and masters who have **AD/ART**, vision - mission and work programs that are in line with both academic and non-academic educational goals at the Faculty of Pharmacy, Universitas Padjadjaran. Alumni association is seen as one of the important pillars in the progress and development of the institution. The name of the Faculty of Pharmacy Alumni Association is the **Ikatan Alumni Universitas Padjadjaran Komisariat Fakultas Farmasi (KOMFAK Farmasi)**.

The active role of alumni in collecting and providing financial assistance has been demonstrated both in the form of individuals and on behalf of the Faculty of Pharmacy Unpad. Since 2011, formal fundraising has been carried out with the Decree of the IKA Pharmacy Unpad Management which reforms the membership by carrying out her-registration and is required to pay member fees. 50% of the fundraising results are allocated to be donated to the Faculty in the form of scholarships and assistance for faculty activities. Almost every year IKA Pharmacy conducts major activities in the form of national seminars and alumni gatherings. In the big event, a number of funds were collected which were used to assist the faculty according to agreed needs. In addition, there are

also scholarships for student study assistance from various generations.

The Alumni Association donates educational facilities in the form of books, equipments and research materials that are donated/lent as well as provides places for simulation of drug counseling for students who will work in the service sector in order to help implement education in the faculty of pharmacy. In addition, the alumni workplace can also be used as a research place for master students of the Faculty of Pharmacy.

Alumni have formed a wide and strong network through the institutions where they work to provide information such as job vacancies, training activities and seminars. In addition, social networks such as Facebook and the mailing lists on the *yahoo group* and WhatsApp (instant messaging application) have also strengthened friendship, communication and information between alumni with their alma mater. This network is also often used as a means of information on job vacancies for new alumni.

Alumni also play an active role in providing input on learning activities such as being involved in the curriculum evaluation process, therefore the material provided can meet the needs of stakeholders. As one example, in the alumni forum there is a community of alumni who work in industry who provide input related to the curriculum in order to be in synergy with the field of work.