ACADEMIC HANDBOOK

BACHELOR DEGREE STUDY PROGRAM OF MEDICINE

FACULTY OF MEDICINE UNIVERSITAS BRAWIJAYA

ACADEMIC YEAR 2021/2022

ACADEMIC HANDBOOK
BACHELOR DEGREE STUDY PROGRAM OF MEDICINE
FACULTY OF MEDICINE UNIVERSITAS BRAWIJAYA
2021/2022

PREFACE

Praise be to Allah SWT for His mercy and guidance, so that the Academic Guidebook for the Bachelor Degree Study Program of Medicine, Faculty of Medicine, Universitas Brawijaya (PS. SKed FKUB) in 2021/2022 can be completed.

The Academic Guidelines are expected to provide clear information and descriptions to leaders, students, lecturers, and all stakeholders regarding the basic provisions of the teaching and learning process in the Bachelor Degree Study Program of Medicine, Faculty of Medicine, Universitas Brawijaya.

The ever-evolving regulations and dynamics of the environment require regular adjustments to academic guidelines. There are some changes made in the guidebook related to the PS's vision and mission which adjusts the vision and mission of universities, faculties, and departments. The assessment also underwent adjustments, namely strengthening of the case-based method and project-based method proportionally. In the assessment, there are two alternative formulas for calculating the final grade that can be chosen by the course coordinator in line with the readiness of participatory and collaborative classes. The rules for the evaluation of stage one are also adjusted by tightening the value of students who can continue to the next year. This handbook also regulates transfer students to PS. SKed FMUB with due observance of government regulations, universities, and faculties. In general, the Curriculum has been outcome-oriented, starting in 2020 this is legally strengthened by the issuance of UB Rector's Regulation no. 30 of 2020 regarding the curriculum of the Independent Study Program Independent Campus, one of the items discussing OBE (*Outcome-Based Education*).

This education can fulfill its function as a reference in the implementation of the teaching and learning process and is used according to applicable rules and procedures. To all parties involved in the preparation of this manual, the Faculty expresses its deepest gratitude and appreciation.

Faculty of Medicine Universitas Brawijaya
Dean,

sign

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S U R A T T U G A S
Nomor : 5787.5/UN10.F08/[illegible]/2021

Dekan Fakultas Kedokteran Universitas Brawijaya memberi tugas kepada :

Nama : Terlampir
Jabatan : Tenaga Pendidik dan Tenaga Kependidikan FKUB

sebagai Tim Penyusun Buku Pedoman Akademik Tahun Akademik 2021/2022 pada PS Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya yang dilaksanakan bulan Juni - September 2021.
Kegiatan tersebut dibiayai oleh PS Sarjana Kedokteran FKUB.

Surat tugas ini dibuat untuk dilaksanakan dengan penuh tanggung jawab.

31 Agustus 2021
a.n. Dekan
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Tembusan :
1. Dekan FKUB sebagai laporan;
2. KPS Sarjana Kedokteran FKUB

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Lampiran : Surat Tugas
Nomor : 5757.5/UN10.F08/KP/2021
Tanggal: 31 Agustus 2021

TIM PENYUSUN BUKU PEDOMAN AKADEMIK TAHUN AKADEMIK 2021/2022
PROGRAM STUDI SARJANA KEDOKTERAN
FAKULTAS KEDOKTERAN UNIVERSITAS BRAWIJAYA
JUNI – SEPTEMBER 2021

Penanggung Jawab	:	Dekan
Pengarah	:	Wakil Dekan Bidang Akademik Wakil Dekan Bidang Umum dan Keuangan Wakil Dekan Bidang Kemahasiswaan Ketua Jurusan Kedokteran Sekretaris Jurusan Kedokteran
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SALINAN

PERATURAN DEKAN FAKULTAS KEDOKTERAN UNIVERSITAS BRAWIJAYA
Nomor 10 TAHUN 2021

TENTANG

PEDOMAN PENDIDIKAN PROGRAM STUDI SARJANA KEDOKTERAN
FAKULTAS KEDOKTERAN UNIVERSITAS BRAWIJAYA
TAHUN AKADEMIK 2021/2022

DEKAN FAKULTAS KEDOKTERAN UNIVERSITAS BRAWIJAYA,

Menimbang : a. bahwa untuk kelancaran proses belajar mengajar pada mahasiswa Program Studi Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya, maka perlu adanya Pedoman Pendidikan sebagai dasar acuan;

b. bahwa berdasarkan surat dinas Ketua Program Studi Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya Nomor : 231/UN10.F08.11.11/PP/2021 tanggal 16 Agustus 2021, hal Pemohonan Peraturan Dekan tentang Buku Pedoman Penerbitan Program Studi Sarjana Kedokteran Tahun Akademik 2021/2022;

b. bahwa berdasarkan pertimbangan sebagaimana dimaksud dalam huruf a dan huruf b, perlu ditetapkan dengan Peraturan Dekan tentang Pedoman Pendidikan Program Studi Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya Tahun Akademik 2021/2022.

Mengingat : 1. Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional (Lembaran Negara Republik Indonesia Tahun 2003 Nomor 78, Tambahan Lembaran Negara Republik Indonesia Nomor 4301);

2. Undang Undang Republik Indonesia Nomor 12 Tahun 2012 tentang Perdidikan Tinggi (Lembar Negara Republik Indonesia Tahun 2012 Nomor 158, Tambahan Lembaran Negara Republik Indonesia Nomor 5336);

3. Peraturan Pemerintah Republik Indonesia Nomor 4 tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Perguruan Tinggi (Lembaran Negara Republik Indonesia Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);

4. Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Republik Indonesia Nomor 44 tahun 2015 tentang Standar Nasional Pendidikan Tinggi (Berita Negara Republik Indonesia Tahun 2015 Nomor 1952) sebagaimana telah diubah dengan Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Republik Indonesia Nomor 50 Tahun 2018 tentang Perubahan Atas Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Republik Indonesia Nomor 44 tahun 2015 tentang Standar Nasional Pendidikan Tinggi (Berita Negara Republik Indonesia Tahun 2018Nomor 1496);

5. Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Nomor 4 Tahun 2016 tentang Organisasi dan Tata Kerja Universitas Brawijaya (Berita Negara Republik Indonesia Tahun 2016 Nomor 130) sebagaimana telah diubah dengan Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi nomor 24 Tahun 2018 tentang Perubahan Atas Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Nomor 4 Tahun 2016 tentang Organisasi dan Tata Kerja Universitas Brawijaya (Berita Negara Republik Indonesia Tahun 2018 Nomor 781);

6. Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Republik Indonesia Nomor 50 Tahun 2018 tentang Statuta Universitas Brawijaya (Berita Negara Republik Indonesia Tahun 2018 Nomor 1978);

7. Keputusan Menteri Pendidikan Nasional Nomor 232/U/2000 tentang Pedoman Penyusunan Kurikulum Pendidikan Tinggi dan Penilaian Hasil Belajar Mahasiswa;
8. Peraturan Rektor Universitas Brawijaya Nomor 25 Tahun 2020 tentang Susunan Organisasi dan Tata Kerja sebagaimana telah diubah dengan Peraturan Rektor Universitas Brawijaya Nomor 70 Tahun 2020 tentang Perubahan Atas Peraturan Rektor Nomor 95 Tahun 2020 tentang Susunan Organisasi dan Tata Kerja (Lembaran Universitas Brawijaya Tahun 2020 Nomor 50);
9. Buku Pedoman Pendidikan Universitas Brawijaya tahun akademik 2021/2022;

MEMUTUSKAN:

Menetapkan : PERATURAN DEKAN TENTANG PEDOMAN PENDIDIKAN PROGRAM STUDI SARJANA KEDOKTERAN FAKULTAS KEDOKTERAN UNIVERSITAS BRAWIJAYA TAHUN AKADEMIK 2021/2022.

Pasal 1

Pedoman Pendidikan Program Studi Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya Tahun Akademik 2021/2022 adalah sebagaimana tercantum dalam Lampiran yang merupakan bagian tidak terpisahkan dari Peraturan Dekan ini.

Pasal 2

Pedoman Pendidikan Program Studi Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya Tahun Akademik 2021/2022 dipergunakan sebagai acuan pelaksanaan pendidikan di Program Studi Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya.

Pasal 3

Pedoman Pendidikan Program Studi Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya Tahun Akademik 2021/2022 diperuntukkan bagi mahasiswa Program Studi Sarjana Kedokteran angkatan tahun 2021, sedangkan bagi mahasiswa angkatan sebelumnya mengacu pada Buku Pedoman Pendidikan Program Studi Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya sesuai dengan tahun akademik ketika yang bersangkutan masuk/terdaftar sebagai mahasiswa Program Studi Sarjana Kedokteran Fakultas Kedokteran Universitas Brawijaya.

Pasal 4

Peraturan Dekan ini mulai berlaku pada tahun akademik 2021/2022.

Ditetapkan di Malang
pada tanggal 1 September 2021
DEKAN FAKULTAS KEDOKTERAN
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ttd.

WISNU BARLIANTO
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ACADEMIC CALENDER UNIVERSITAS BRAWIJAYA
THE ACADEMIC YEAR 2021/2022

I	ODD SEMESTER	DATE
1	Administrative Registration (payment of Tuition Fee) for continuing students	2 - 12 August 2021
2	Academic Registration (filling out Study Plan) for continuing students	2 - 13 August 2021
3	End date of course cancellation on the study plan	To be determined by Faculty Policy
4	Class + Mid Semester Examination + Final Semester Examination in the odd semester	23 August - 17 December 2021
5	Student data reconciliation	20 September - 1 October 2021
6	PDDikti Reporting, Report Semester 2020.2 and 2021.1 (new students)	1 - 16 October 2021
7	Due date of the announcement of final semester examination grade and study report	20 December 2021
8	The evaluation process of student learning outcomes	21 December 2021
9	Due date of judicium ***)**	22 December 2021
10	Due date of determination process for student study accomplishment	23 December 2021
11	End date of Odd Semester	23 December 2021
II	**EVEN SEMESTER**	**DATE**
1	Administrative Registration (online payment of Tuition Fee)	25 January - 4 February 2022
2	Academic Registration (Filling out study plan)	25 January - 5 February 2022
3	End date of course cancellation on the study plan	To be determined by Faculty Policy
4	Class + Mid Semester Examination + Final Semester Examination in the even semester	7 February - 10 June 2022
5	Student data reconciliation	20 February - 11 March 2022
6	PDDikti Reporting, Report Semester 2020.1 and 2020.2 (new students of Post Graduate Study)	7 - 18 March 2022
7	Due date of the announcement of final semester examination grade and study report	14 June 2022

8	Intermediate Semester	20 Juni - 15 Juli 2022
9	Due date of the announcement of final semester examination grade and study report of the Intermediate Semester	19 Juli 2022
10	The evaluation process of student learning outcomes	20 Juli 2022
11	Due date of judicium ***)**	21 Juli 2022
12	Due date of determination process for student study accomplishment	22 Juli 2022
13	End date of Even Semester	22 Juli 2022
III	**UNIVERSITY EVENT**	**DATE**
1.	The ceremony of 58th UB Dies Natalis (Scientific Speech)	05 January 2022

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CHAPTER I
INTRODUCTION

1.1. History, Development of Medical Education Faculty of Medicine Universitas Brawijaya

Malang Medical College or Sekolah Tinggi Kedokteran Malang (STKM) is the forerunner of the establishment of the medical faculty of Universitas Brawijaya which was founded on September 14, 1963. Medical education has been known in Malang since 1946, 17 years before the establishment of STKM, most of the teaching staff of former medical schools in Malang were gathered. Surabaya NIAS (Nederlands Indische Artsen School)/STOVIT (School Tot Opleidig Van Indische Tandartsen), ex-IKA DAIGAKU/SHIKA IGAKUBU (the name for medical school/dentistry during the Japanese occupation) from Jakarta and Surabaya and their staff. In June 1947, Malang Medical College Hall was forced to stop its activities after the Dutch succeeded in occupying the city of Malang. Medical education was then continued in Jakarta and Surabaya with more complete facilities and personnel after the Dutch handed over sovereignty to the Republic of Indonesia.

The idea of re-establishing a Medical College in Malang resurfaced in 1960-1962. With the support of Malang community leaders at the time, the ad hoc committee of the Malang Branch of the Indonesian Doctors Association began the formation of the Founding Committee of the Faculty of Medicine. With full assistance from civil and military officials in the city of Malang, finally, on September 14, 1963, located at Malang City Hall, the Malang Medical College (STKM) was inaugurated with a private status. On January 14, 1974, the Medical College of Malang officially merged with Universitas Brawijaya with the status of a state university and changed its name to the Faculty of Medicine, Universitas Brawijaya (FMUB).

The Bachelor's Degree Study Program of Medicine was in the Department of Medicine in 2012. And in 2016 based on changes in the organizational structure at FMUB, it became the Bachelor's Degree Study Program of Medicine (hence after is called PSSKed) which is under the Department of Medicine. It is responsible for academic implementation at the Bachelor of Medicine level. In 2014 the Bachelor's Degree Study Program of Medicine was accredited A by BANPT, and in 2018 it was certified by the ASEAN University Network-Quality Assurance (AUN-QA). The Bachelor Degree Study Program of Medicine was also re-accredited A by LAMPTkes in 2019.

1.2. Vision, Mission, and Basic Educational Goals

The vision of the Bachelor's Degree Study Program of Medicine FMUB

To become an international standard medical education study program with excellence in biomedical skills, emergency medicine & disaster management; social entrepreneurship & collaborative leadership to improve the quality of life of the community through continuous innovation in the fields of education, research, and community service.

Mission of the Bachelor's Degree Study Program of Medicine FMUB

1. Organizing education in the field of medicine at a leading, international standard that produces graduates who practice Pancasila values and scientific culture.
2. Organizing education in the field of medicine that produces graduates as agents of development and dissemination of medical science and technology through research and community service with excellence in biomedical skills, emergency medicine & disaster management, social entrepreneurship, and collaborative leadership to improve the quality of life of the community.
3. Organizing superior, equitable, and sustainable higher education governance.

Values

1. Professionalism
2. Dedicated
3. Futuristic
4. Commitment and Togetherness
5. Excellent
6. Entrepreneurial spirit

Goals

The Vision/Mission of the Bachelor's Degree Study Program of Medicine, Faculty of Medicine, Universitas Brawijaya (PSSKed FMUB) is translated into a number of clear, observable, and measurable goals.

The intended objectives are:

1. Produce graduates who are superior, professional, and have an entrepreneurial spirit who are able to compete in the national and international scope.
2. Produce and disseminate research in national and international journals as well as Intellectual Property Rights (IPR) in the field of the latest medical science to be utilized for the development of science, education, and services to the community.
3. Produce and disseminate community service activities in the field of medicine to improve public health status.
4. Collaborating on institutional development, education, research, and community service at the regional, national, and international levels.

CHAPTER II
STUDENT ADMISSION SYSTEM

Based on Law Number 12 of 2012 concerning Higher Education, Government Regulation Number 4 of 2014 concerning the Implementation of Higher Education and Management of Higher Education, Regulation of the Minister of Research, Technology, and Higher Education Number 126 of 2016 concerning New Student Admissions for Undergraduate Programs at State Universities done through National Selection and Independent Selection. Regulation of the Minister of Research of the Minister of Research, Technology and Higher Education of the Republic of Indonesia number 60 of 2018 concerning New Student Admissions in Higher Education; The establishment of the Higher Education Entrance Test Institute (LTMPT) by the Minister of Research, Technology and Higher Education of the Republic of Indonesia on January 4, 2019. So the national selection for new undergraduate students in 2019 consists of the National Selection for State Higher Education Entrance (SNMPTN) and Joint Selection for College Entrance to State High School (SBMPTN). Data and materials for the selection of the SNMPTN and SBMPTN pathways will then be managed and processed by LTMPT the only institution that administers standardized higher education tests in Indonesia. Registration and announcement of national selection result through the national committee through the http://ltmpt.ac.id page and re-registration via selma.ub.ac.id. In accordance with Announcement number 3651/UN10/AK/2019 regarding the admission of new students through the Universitas Brawijaya Independent Admission (SMUB) in 2019, the entrance test is carried out through a written exam which is held independently by Universitas Brawijaya. All registrations, announcements of selection results, and SMUB re-registration are only done through the web selma.ub.ac.id. In addition, FMUB also carries out the International Program Admission (SPI) which is organized through the coordination of the International Office of Brawijaya University. Prospective new students of the Faculty of Medicine, Medical Study Program, through the SNMPTN, SBMPTN, SMUB, and SPI selection pathways must pass the health requirements, namely (a) Not having a physical disability or visual impairment (blind, deaf, speech impaired and quadriplegic), (b) may not total or partial color blindness, (c) no mental disorder, (d) drug-free and (e) a minimum IQ of 100.

2.1. SNMPTN

The National Selection of State Universities Admission (SNMPTN) is a selection based on tracking academic achievements and/or portfolios of prospective students. The capacity quota for each undergraduate medical education program is set at 20% of the capacity of the study program. The requirements and procedures for accepting new students through SNMPTN follow the LTMPT provisions. Participants required to take part in the SNMPTN are candidates who are in the last grade of secondary education and will graduate in the current year (2019). Prospective participants have good academic achievements and are consistently shown by being the best quota in school and participating in the selection made by LTMPT. Prospective participants who enter the quota for the best ranking in schools are determined

based on school accreditation and prospective participants fulfill other requirements determined by Universitas Brawijaya. The official page is http://www.snmptn.ac.id

2.2. SBMPTN

The Joint Selection of State Universities Admission (SBMPTN) is carried out based on the results of the Computer-Based Written Examination (UTBK) only or the results of the UTBK and other criteria determined jointly by the PTN. The UTBK can be taken by students from secondary education (SMA/MA/SMK) and the equivalent as well as package C graduates in 2017, 2018, and 2019. The 2019 SBMPTN UTBK consists of the Scholastic Potential Test (TPS) and the Academic Competency Test (TKA). UTBK held by LTMPT is used as one of the selection criteria for prospective students by state universities.

2.3. Independent Admission (SMUB)

Independent admission/own entrance test is a selection to enter Universitas Brawijaya which is held independently by Universitas Brawijaya.

2.4. International Program Admission (SPI)

International Program Admission is a selection that is carried out through written exams and interviews based on partnerships with foreign parties organized through the coordination of the International Office of Universitas Brawijaya.

CHAPTER III
GRADUATES' COMPETENCE AND LEARNING OUTCOMES

3.1. Competence of graduates

By elaborating an integrative approach, medical education at FMUB is a continuum between academic education (which is managed by the Bachelor's Degree Study Program of Medicine) and medical professional education (which is managed by the Doctor Profession Study Program). The result of education is to produce doctors who are ready to provide primary health services in Indonesia who will face the challenges of global competition and are also ready to develop themselves either through further study at the academic level (S2 and S3) or professional level (specialist and consultant specialist). Therefore, in some formulations of competency and/or learning outcomes from the Bachelor's Degree Study Program of Medicine, the word "doctor" is used because basically the Bachelor's Degree Study Program of Medicine produced is a link/journey (milestone) to become a doctor with the main and excellent competencies same. The Bachelor of Medicine program is an inseparable stage with the ultimate goal of achieving the competence of doctors who have special characteristics of competence and superior values of FMUB (see Figure 3.1). This is under the umbrella of the Rector of Brawijaya University's law regulation number 34 of 2020 regarding the curriculum of the independent study program, independent study-campus article 7 concerning the output-based curriculum.

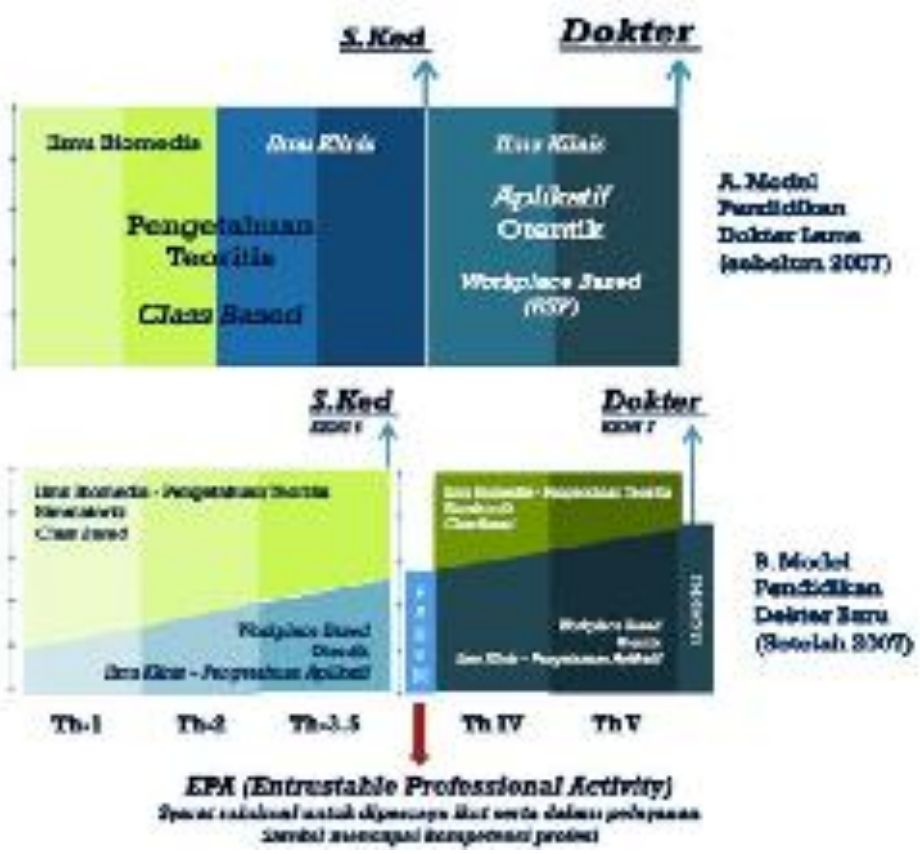


Figure 3.1 The old (A) and new (B) versions of the Medical Education Model applied in FMUB

Notes of Figure 3.1:

A. The old version of the Medical Education model (Before 2007)
   Bachelor's Degree Study Program in Medicine
   1st Year : Biomedical Science
   2nd – 3rd Year : - Theoretical Knowledge
   - Class Based
   3rd – 4th Year : Clinical Science

   Doctor Profession Study Program
   4th – 5th Year : - Clinical Sciences
   - Applicable
   - Authentic
   - Workplace Based (RSP)

B. The new version of the Medical Education model (After 2007)
   Bachelor's Degree Study Program in Medicine
   (Competency Qualification Skeleton Framework/KKNI 6)
   1st – 3.5th Year : - Biomedical Science
   - Theoretical Knowledge

- Class Based

- Workplace Based
- Authentic
- Clinical Sciences – Applicative knowledge

PANUM

Doctor Profession Study Program
(Competency Qualification Skeleton Framework/KKNI 7)
4^{th} – 5^{th} Year : - Biomedical Science
- Simulated
- Class-Based

- Workplace Based (RSP)
- Authentic
- Clinical Sciences – Applicative knowledge

The difference between the academic (S1) and professional stages is the level (level) of achievement, both referring to the KKNI, as well as the Competency Standards of Medical Doctors in Indonesia (hence after is called SKDI) competency level and which has been adjusted to the superior competence of FMUB (CHAPTER III).

Referring to the National Higher Education Standards (SNPT) and Competency Standards of Medical Doctors in Indonesia (SKDI), PSSKed applies an outcome-based education approach in the form of a Competency-Based Curriculum (KBK). Through the KBK approach, all processes, materials, and assessments are directed to achieve the formulation of the institution's expected learning outcomes. From the adaptation of various National Standards (SKDI and the Indonesian National Qualifications Framework/KKNI) and International Competency Standards (such as CanMEDS - Canadian Medical Education Directives, and the AAMC Medical Student Learning Outcome Project, Scottish Doctor and Essential Minimum Requirements for Medical Students) which have been adapted to the aspirations of both internal and external stakeholders, the Bachelor's Degree Study Program of Medicine at the academic stage has determined a systematic learning outcome (Learning Outcome) called the Competency Standards for PSSKed FMUB Graduates. PSSKed Graduates Competency Standards, consisting of Competency Areas are Program Learning Outcomes (Program Learning Outcomes). The learning outcomes of this program are then translated into learning outcomes for competency courses/blocks to learning objectives (Learning Objectives) in each academic activity.

3.2. Standard of PSSKed FMUB Graduates

The competency Standard of Medical Doctors in Indonesia (SKDI) is a minimum standard of graduate competence and is not a standard of authority for primary care physicians. The Indonesian Doctor Competency Standards consist of 7 (seven) competency areas derived from the description of the duties, roles, and functions of primary care physicians. These seven

competency areas are added by three leading competencies from the Bachelor's Degree Study Program of Medicine. Each competency area is broken down into several competency components, which are further broken down into the abilities expected at the end of education. Schematically, the composition of Indonesian Doctor Competency Standards can be depicted in Figure 3.2.

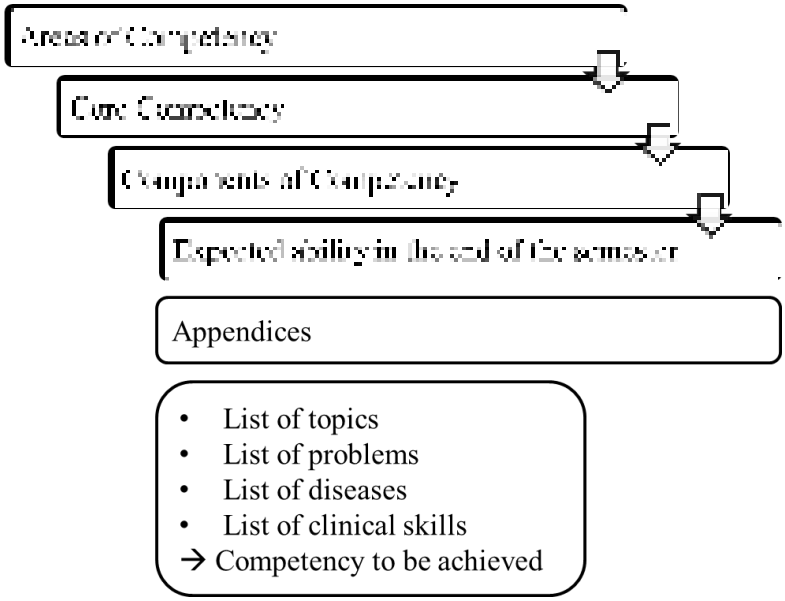


Figure 3.2 Schematic Structure of Indonesian Doctor Competency Standards (Indonesian Doctor Competency Standards, KKI, 2012)

3.2.1. Areas of Competence

Competence is built on a foundation consisting of noble professionalism, self-awareness, and self-development, as well as effective communication, and is supported by pillars in the form of information management, scientific foundations of medical science, clinical skills, and management of health problems. In medical education at PSSKed, three superior competencies are formulated in the Strategic Plan (hence after is called Renstra) of the Faculty of Medicine, Universitas Brawijaya so that the competency areas are arranged in the following order:

1) High professionalism
2) Self-awareness and self-development
3) Effective communication
4) Information management
5) Scientific foundation of medical science
6) Clinical skills
7) Management of health problems
8) Emergency Medicine & Disaster Management
9) Biomedical Research Capability
10) Leadership & social entrepreneurship

The ten competency areas are described as core competencies and supporting competencies, each of which is accompanied by a list of health problems, subjects, and an index of clinical situations (either a list of diseases or relevant clinical skills). These ten competency areas will then be distributed into Competency Courses (MKK) which can be seen further in Chapter IV (Curriculum). The learning outcomes framework, competency areas, and their derivatives are presented in Figure 3.3.

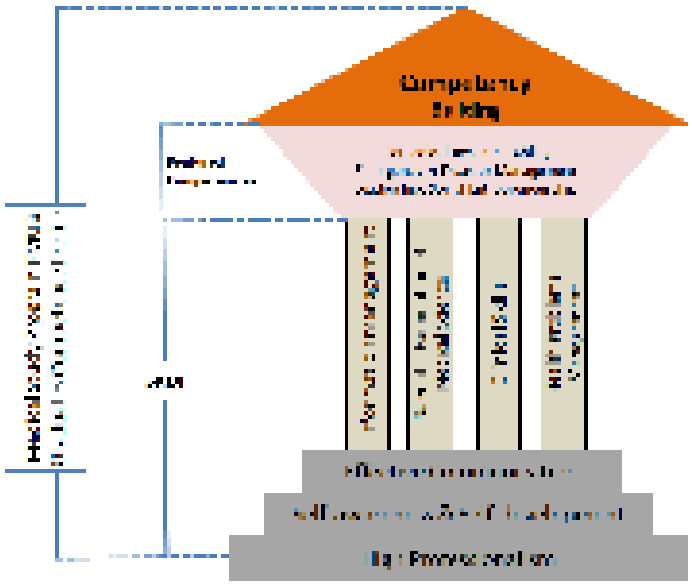


Figure 3.3 Expectative Concept of Competency Building for PSSKed Graduates and their position on SKDI and Leading Competencies

3.2.1.1. Competency Component

A. The Area of Sublime Professionalism
   1. Belief in God Almighty / Almighty
   2. Moral, ethical and disciplined
   3. Be aware and obey the law
   4. Socio-cultural insight
   5. Behave professionally

B. Areas of Self-Introspection and Self-Development
   1. Apply introspection
   2. Practice lifelong learning
   3. Develop knowledge

C. Areas of Effective Communication
   1. Communicate with patients and families
   2. Communicate with partners

3. Communicate with the community

D. Information Management Area
   1. Access and assess information and knowledge
   2. Disseminate information and knowledge effectively to health professionals, patients, communities, and related parties to improve the quality of health services.

E. Areas of the Scientific Foundation of Medical Science
   Apply the latest biomedical sciences, humanities, clinical medicine, and public health/preventive medicine/community medicine to manage health problems holistically and comprehensively.

F. Clinical Skills Area
   1. Perform diagnostic procedures
   2. Carry out a holistic and comprehensive management procedure.

G. Health Issues Management Area
   1. Carry out health promotion for individuals, families, and communities
   2. Implement prevention and early detection of health problems in individuals, families, and communities
   3. Manage individual, family, and community health problems
   4. Empower and collaborating with the community to improve health status
   5. Manage resources effectively, efficiently, and sustainably in solving health problems
   6. Access, analyze, and implement specific health policies that are priorities for each region in Indonesia.

H. Emergency Medicine & Disaster Management Area
   1. Apply the principle of handling emergencies in primary care independently and in teams
   2. Take action/handle household emergencies (Household pre-hospital care)
   3. Take action/handle workplace emergencies (workplace pre-hospital care)
   4. Apply the principle of emergency service facility management in primary & first referral services
   5. Apply health and resource management principles during disasters
   6. Communicate, professionalism, and legal etiquette in critical/emergencies
   7. Foster interpersonal relationships so that they can work together effectively in disaster management teams
   8. Educate the public about medical emergencies by applying the principles of cultural competence and the effective and efficient use of media

I. Areas of Biomedical Research Capability
   1. Demonstrate mastery of the latest biomedical-biomolecular knowledge
   2. Describe the various essential analytical methods or techniques used in current biomedical/biomolecular research
   3. Produce at least one creative scientific work (written or engineering/design) in the biomedical/biomolecular field during the study period in both Indonesian and English

J. Areas of collaborative leadership and social entrepreneur
   1. Apply knowledge and basic principles of leadership & social entrepreneur
   2. Can be an agent of change in the social-community sector
   3. Promote the mission to grow and maintain the social value
   4. Apply entrepreneurial skills in entrepreneurial simulation activities
   5. Utilize resources (5M) effectively, efficiently, and creatively
   6. Be able to design an applicable health financing management model for individual/community health services (with theoretical, regulatory, and practical studies)
   7. Have and demonstrate resilience and personal accountability to the institutions served in order to achieve the desired mission and social impact

3.2.1.2. Competency Description

A. High professionalism

1. Core Competencies:

Be able to carry out professional medical practice in accordance with divine values and principles, noble morals, ethics, discipline, law, and socio-culture.

2. Graduates of the Bachelor's Degree Study Program of Medicine FMUB have the ability to:

a. Belief in God Almighty/Almighty:
   1) Be godly and behave in the practice of medicine
   2) Have the attitude that what is done in medical practice is a maximum effort.

b. Moral, ethical and disciplined:
   1) Behave in accordance with high standards of moral values in medical practice
   2) Act in accordance with the basic principles of medical ethics and the Indonesian medical code of ethics
   3) Be able to make decisions on ethical dilemmas that occur in individual, family, and community health services
   4) Be disciplined in carrying out medical practice and in the community

c. Be aware and obey the law:
   1) Identify legal problems in medical services and provide suggestions on how to solve them
   2) Realize the responsibility of doctors in the realm of law and public order
   3) Obey the applicable laws and regulations
   4) Assist in law enforcement and justice.

d. Socio-cultural insight:
   1) Identify the socio-cultural-economic community being served
   2) Appreciate differences in perceptions that are influenced by religion, age, gender, ethnicity, disability, and socio-cultural-economic in carrying out medical practice and in society
   3) Respect and protect vulnerable groups
   4) Appreciate complementary and alternative health efforts that are developing in a multicultural society.

e. Behave professionally:
   1) Show character as a professional doctor
   2) Be helpful and have a culture of help
   3) Prioritizing patient safety
   4) Be able to work together intra- and interprofessional in the health care team for patient safety
   5) Implement health service efforts within the framework of national and global health systems.

B. Introspection and Self-Development

1. Core Competencies:

Able to practice medicine by being aware of limitations, overcoming personal problems, developing oneself, participating in refresher and continuous knowledge improvement, and developing knowledge for patient safety.

2. Graduates of FMUB Medical Undergraduate Education have the ability

a. Practice self-awareness
   1) Recognize and overcome the problem of one's own physical, psychological, social, and cultural limitations
   2) Respond to professional challenges
   3) Recognize the limitations of one's abilities and refer to those who are more capable
   4) Receive and respond positively to feedback from other parties for self-development.

b. Practice lifelong learning

1) Recognize self-professional performance and identify learning needs to overcome weaknesses
2) Take an active role in professional development efforts.

c. Develop new knowledge
Conduct scientific research related to health problems in individuals, families, and communities and disseminate the results.

C. Effective Communication

1. Core Competencies:
Able to explore and exchange information verbally and nonverbally with patients of all ages, family members, community, colleagues, and other professionals.

2. Graduates of FMUB Medical Undergraduate Education have the ability

a. Communicate with patients and their families:
1) Build relationships through verbal and nonverbal communication
2) Empathize verbally and nonverbally
3) Communicate using polite and understandable language
4) Active listening to explore health problems holistically and comprehensively
5) Deliver health-related information (including bad news, and informed consent) and conduct counseling in a polite, good, and correct manner
6) Demonstrate sensitivity to bio-psycho-socio-cultural and spiritual aspects of patients and families.

b. Communicate with work partners (colleagues and other professionals):
1) Carry out good and correct consultation and referral procedures
2) Build interprofessional communication in health services
3) Provide actual and relevant information to law enforcement, health insurance companies, mass media, and other parties if needed
4) Present scientific information effectively
5) Communicate with the community
6) Communicate with the community in order to identify health problems and solve them together
7) Conduct advocacy with related parties in order to solve individual, family, and community health problems.

D. Information Management

1. Core Competencies:

Be able to utilize information communication technology and health information in medical practice.

2. Graduates of FMUB Medical Undergraduate Education have the ability

a. Access and assess information and knowledge:
   1) Utilize communication and health information technology to improve the quality of health services
   2) Utilize health information management skills for lifelong learning.

b. Disseminate information and knowledge effectively to
   1) Other health professionals, patients, communities, and related parties to improve the quality of health services:
   2) Utilize information management skills for information dissemination in the health sector.

E. Scientific Foundation of Medicine

1. Core Competencies:

Be able to solve health problems based on the scientific foundation of the latest medical and health sciences to get optimum results.

2. Graduates of the Bachelor's Degree Study Program of Medicine FMUB have the ability to:

a. Apply the latest in Biomedical, Humanities, Clinical Medicine, and Public Health / Preventive Medicine / Community Medicine sciences to manage health problems holistically and comprehensively.
b. Apply the principles of Biomedical science, Humanities science, Clinical Medicine science, and Public Health Science / Preventive Medicine / Community Medicine related to the promotion of individual, family, and community health.
c. Apply the principles of biomedical science, humanities, clinical medicine, and public health / preventive medicine/community medicine related to the prevention of individual, family and community health problems.
d. Apply the principles of Biomedical science, Humanities science, Clinical Medicine science, and Public Health Science / Preventive Medicine / Community Medicine to determine priority health problems in individuals, families, and communities.
e. Apply the principles of Biomedical science, Humanities, Clinical Medicine, and Public Health / Preventive Medicine / Community

Medicine related to the occurrence of individual, family, and community health problems.

f. Use clinical data and rational investigations to establish a diagnosis.
g. Use scientific reasons in determining the management of health problems based on etiology, pathogenesis, and pathophysiology.
h. Determine disease prognosis through understanding the principles of Biomedical Sciences, Humanities Sciences, Clinical Medicine Sciences, and Public Health Sciences / Preventive Medicine / Community Medicine.
i. Apply the principles of Biomedical Sciences, Humanities, Clinical Medicine, and Public Health Sciences / Preventive Medicine / Community Medicine related to medical and social rehabilitation for individuals, families, and communities.
j. Apply the principles of Biomedical Sciences, Humanities, Clinical Medicine, and Public Health / Preventive Medicine / Community Medicine related to legal and judicial interests.
k. Take into account the ability and willingness of patients, medical-scientific evidence, and limited resources in health services to make decisions.

F. Clinical Skills

1. Core Competencies

Be able to perform clinical procedures related to health problems by applying the principles of patient safety, personal safety, and the safety of others.

2. Graduates of the Bachelor's Degree Study Program of Medicine FMUB have the ability to:

a. Perform diagnostic procedures:
   1) Perform and interpret the results of auto-, allo- and hetero-anamnesis, general and specific physical examinations according to the patient's problems
   2) Perform and interpret basic supporting examinations and propose other rational examinations.
b. Perform procedures for managing health problems holistically and comprehensively:
   1) Conduct education and counseling
   2) Implement health promotion
   3) Perform preventive medical actions
   4) Perform curative medical actions
   5) Perform rehabilitative medical treatment

6) Carry out protective procedures against things that can endanger yourself and others
7) Carry out medical actions in clinical emergencies by applying patient safety principles
8) Take medical action with a medico-legal approach to health/injury issues related to law.

G. Management of Health Problems

1. Core Competencies:

Able to manage individual, family, and community health problems in a comprehensive, holistic, integrated, and sustainable manner in the context of primary health care.

2. Graduates of the Bachelor's Degree Study Program of Medicine FMUB have the ability

a. Carry out health promotion for individuals, families, and communities:
   1) Identify the need for changes in mindset, attitude, and behavior, as well as lifestyle modification for health promotion in various age groups, religions, communities, genders, ethnicities, and cultures
   2) Plan and implement health education in the context of health promotion at the individual, family, and community levels

b. Implement prevention and early detection of health problems in individuals, families, and communities
   1) Prevent the emergence of health problems
   2) Carry out screening activities for latent disease risk factors to prevent and slow the onset of disease
   3) Take precautions to slow down the progression and onset of complications of disease and or disability.

c. Carry out the management of individual, family, and community health problems:
   1) Interpret clinical data and formulate it into a diagnosis
   2) Interpret family health data in order to identify family health problems
   3) Interpret public health data in order to identify and formulate community diagnoses
   4) Select and implement the most appropriate management strategy based on the principles of quality, cost, and evidence-based control
   5) Manage health problems independently and responsibly (see the SKDI List of Topics and Diseases List) by taking into account the principles of patient safety

6) Consult and/or refer in accordance with applicable medical service standards (see List of Diseases)
7) Make written medical instructions that are clear, complete, precise, and legible
8) Make medical certificates such as certificates of illness, health, death, extraordinary event reports, medicolegal reports, and other medical statements according to their authority including visum et repertum and identification of bodies
9) Write drug prescriptions wisely and rationally (right indication, right drug, right dose, right frequency and method of administration, and according to patient's condition), clear, complete, and legible.
10) Identify various indicators of treatment success, monitor the progress of management, improve, and change therapy appropriately
11) Determine the prognosis of health problems in individuals, families, and communities
12) Perform basic medical rehabilitation and social rehabilitation for individuals, families, and communities
13) Apply the principles of epidemiology and medical services in a comprehensive, holistic, and sustainable manner in managing health problems
14) Carry out management in outbreaks and disasters, starting from problem identification to community rehabilitation.

d. Empower and collaborate with the community in an effort to improve health status:
   1) Empower and collaborate with the community to be able to identify actual health problems that occur and overcome them together
   2) Cooperate with other professions and sectors in the context of community empowerment to overcome health problems.

e. Manage resources effectively, efficiently and sustainably in solving health problems:
   1) Manage human resources, finance, facilities, and infrastructure effectively and efficiently
   2) Implement integrated quality management in primary health care with a family medicine approach
   3) Implement health management and health service institutions.

f. Access and analyze and implement specific health policies that are the priorities of each region in Indonesia:
   Describe how policy choices can affect public health programs from fiscal, administrative, legal, ethical, social, and political aspects.

H. Emergency Medicine and Disaster Management;

1. Core Competence

Graduates of FMUB doctor education are able to identify problems in individuals and communities and take appropriate medical measures to save against the risk of death or disability or significant physical and mental loss, by applying appropriate principles and elements of management.

2. Graduates of the Bachelor's Degree Study Program of Medicine FMUB have the ability to:

a. Apply the Principles of Handling Staffing in Primary Services independently or in a team
   1) Apply the principle of handling early gravity to Airway Breathing Circulation Disability (ABCD)
   2) Know the applicable gravity referral system in primary services
   3) Explain the approach to "undifferentiated" patients
   4) Explain the difference in principles between stable patients and unstable patients, identifying clinical signs as well as life-threatening clinical symptoms.
   5) Interpret abnormal vital signs, particularly related to gravity (heart rate, breathing, blood pressure, temperature, oxygen saturation), and identify the cause
   6) Master pharmacodynamics and pharmacokinetics of essential drugs in primary services and selecting /using them in principle 5 appropriately
   7) Perform first-line acute pain management both by using oral pain medications and limited analgesic injections

b. Do Action/Handle of Household Pre-hospital-care Case
   1) Know the pattern of medical gravity problems that often occur in working households such as due to fire, buried buildings/ruins/poisoning of household chemicals, including drug poisoning.
   2) Determine the diagnosis and perform acute emergency management/ medical intervention, provide basic life assistance
   3) Provide immediate basic life assistance (CPR) or become the initiator of the field team in providing resuscitation
   4) Apply the principles of referral and transportation management of household emergency patients

c. Do Workplace Pre-hospital-care

1) Know the pattern of medical gravity problems that often occur in the workplace such as due to fire, buried buildings/ruins/soil, chemical poisoning, and drowning.
2) Recognize and assess the severity of the patient's clinical presentation and rapid medical response
3) Be reliable in determining the diagnosis and management of acute gravity including in performing first aid using available resources (adaptive practical medical ability)
4) Provide immediate basic life support (CPR) or become an initiator of the field team in providing resuscitation
5) Apply the principles of referral and transportation management of patients emergency workplace emergency

d. Apply the Principles of Staffing Service Facility Management in Primary Services & First Referral
   1) Know and can use medical tools &materials that can be used for first aid
   2) Can design a primary service practice room and place the staffing medical tools &materials in the appropriate place
   3) Perform first aid in the primary service practice room

e. Apply the Principles of Health and Resource Management in Disasters
   1) Master the principles of disaster management
   2) Master the pharmacodynamics and pharmacokinetics of essential medicines and choose/use them according to principle 5 Right in disaster situations
f. Conduct Communication, as well as demonstrate Professionalism and apply ethical principles in critical situations/gravity
g. Foster interpersonal relationships so that they can cooperate effectively in disaster management teams
h. Conduct Public Education on Medical Staffing by applying the principles of cultural competence and the use of effective and efficient media
   1) Explain the principles of cultural competence
   2) Mention and explain the character (advantages and disadvantages) of various communication media that can be used in public education

I. Biomedical Research Ability;

1. Core Competence

Graduates of the Bachelor's Degree Study Program of Medicine FMUB produce creative scientific work in the field of biomedicine and biomolecular based on steady theoretical and technical knowledge.

2. **Graduates of the** Bachelor's Degree Study Program of Medicine **FMUB have the ability to:**
   a. Demonstrate mastery of the latest biomedical-biomolecular knowledge
   b. Explain the various essential analytical methods or techniques used in the latest biomedical-biomolecular research
   c. Produce at least one creative scientific work (writing or engineering/design) in the field of biomedicine and/or biomolecular during the study period in Indonesian and English

J. Collaborative leadership & Social Entrepreneurship.

1. **Core Competence**

   Graduates of the Bachelor's Degree Study Program of Medicine FMUB demonstrate collaborative leadership skills in scientific, and student organizations at the local, national, and international levels. Graduates are also able to become initiators of innovation and social transformation by collaborating with experts in various fields, both in health building blocks and non-health which includes education, individual-community health, environment, and organizational development or social-community business in favor of marginalized/special needs/disadvantaged community groups.

2. **Graduates of the Bachelor's Degree Study Program of Medicine FMUB have the ability to:**
   a. Apply the basic knowledge and principles of social leadership & entrepreneur
      1) Demonstrate responsibility in creating and achieving common goals in an organization
      2) Develop interpersonal relationships, respect differences of opinion, and be able to understand differences in character and the ability of individuals in achieving cooperation in a team
      3) Be able to analyze situations and conditions of self and/or organization with SWOT analysis
      4) Perform gap analysis and identify opportunities.

   b. Can be an agent of change in the social-community sector
      1) Able to show initiative when confronted with challenges/problems

2) Develop creative ideas and/or new approaches to solving problems in society, including improving the quality of existing improvement projects
3) Apply creative decision-making (creative decision-making) including efforts to resolve obstacles in social improvement projects.

c. Promote a mission to cultivate and maintain social values.

d. Apply entrepreneurial skills in entrepreneurial simulation activities.
1) Understand the stages in preparing the business processes of non-profit community organizations (social enterprises) in advocating/solving health problems
2) Design social intervention programs in the community in an innovative way/is the right work to solve problems in the community

e. Enable 5M resources (Man, Machines, Money, Methods, Materials) effectively, efficiently, and creatively

f. Be able to design health financing management models for individual/community health services applicatively (with theoretical, regulatory, and practical studies)

g. Have and demonstrate personal resilience and accountability to the institutions served for the achievement of the desired mission and social impact

3.3. PSSKed FMUB Learning Outcomes

Although the KKI Doctors Professional Education Standard has provided the specificity of the education model for doctor education as needed and the latest medical education, there are differences in the implementation of regulations causing in terms of legal education Indonesian doctors are also required to formulate a description of learning achievements in accordance with the KKNI by using a more general descriptor, as a reference that becomes the content of SKPI documents. Therefore, from the results of discussions with stakeholders (Stakeholders) have been prepared Learning Achievement (CP) Study Program as described in the following section. In the implementation of the Curriculum, this CP description is mapped into the Standard of Competency of The Study Program (SKPS) so that the Curriculum can be operationally implemented in accordance with the rules of Evidence-Based Medical Education, namely theory-based medical education and the best evidence.

3.4. General Basic Learning Outcomes

1. Believe in the Almighty God.
2. Understand and demonstrate an attitude in accordance with the Indonesian Medical Code of Ethics
3. Understand the medical aspects of medical practice in Indonesian society with a diverse culture

4. Be aware of their abilities and limitations related to medical knowledge and practice lifelong learning by always following the development of cutting-edge medical science and practice
5. Respect the diversity of cultures, views, beliefs, religions, and opinions/findings of others.

3.5. Learning Outcomes for the Bachelor's Degree Study Program of Medicine

1. Able to utilize science and technology in its field of expertise and ability to adapt to the situation faced in problem-solving
    a. Master skills in applying science and technology in the fields of biomedicine, anatomy and histology, physiology, biochemistry-biomolecular, genetics, reproduction, clinical pathology, anatomical pathology, microbiology, parasitology, immunology, pharmacology, and nutrition to the entire organ system of the body.
    b. Able to identify agents, that is; viruses, bacteria, parasites, fungi, toxins, and radiation as the cause of the disease.
    c. Able to analyze metabolism, travel (pharmacokinetics), and the workings (pharmacodynamics) of medicine and plant medicinal ingredients.
2. Master the theoretical concepts of a particular field of knowledge in general and the theoretical concepts of special parts in the field of knowledge in-depth, and be able to formulate the solution of procedural problems
    a. Master knowledge of basic medical principles related to the occurrence of health problems, along with pathogenesis and pathophysiologists.
    b. Master knowledge of health problems both molecularly and cellular through understanding normal mechanisms in the body.
    c. Master and understand the knowledge of congenital diseases, trauma, infections, and degenerative.
    d. Master knowledge of promotive, preventive, curative, and rehabilitative principles on health problems.
    e. Master knowledge of the national health system and the priorities of health issues.
    f. Master knowledge of emergencies (disaster management) and biomedical-biomolecular
3. Able to make strategic decisions based on analysis of information and data, and provide guidance in choosing various alternative solutions
    a. Master the skills of conducting scientific studies by compiling research planning and reporting as well as the preparation of scientific papers.
    b. Master skills in identifying disease agents, including; viruses, bacteria, parasites, fungi, toxins, and radiation.
    c. Master skills in analyzing the workings of drugs and medicinal plants.
    d. Master skills in analyzing epidemiology and compiling reporting of disease events.
    e. Be able to analyze epidemiological reports of a health problem.
    f. Be able to carry out a risk analysis of extraordinary events (KLB) and outbreaks
    g. Master skills in implementing the management of Puskesmas and primary health services.

h. Master the skills of epidemiological surveys to determine priority health problems in the national health system.
i. Master the management skills of pre-hospital emergency care (pre-hospital emergency care) and disaster management (disaster medicine)

4. Responsible for his work and can be given responsibility for the achievement of organizational work
   a. Responsible for one's work and can be given responsibility for the achievement of the results of work in basic medical science, among others: Anatomy and Histology, Physiology, Biochemistry, Biomolecular, Genetics, Reproduction, Clinical Pathology, Anatomical Pathology, Microbiology, Parasitology, Immunology, Pharmacology, and Nutrition.
   b. Master and implement health care center management and primary health services in promotive, preventive, curative, and rehabilitative principles to health problems.

CHAPTER IV
CURRICULUM

4.1. Curriculum Overview

The Bachelor's Degree Study Program of Medicine is a continuing education consisting of the Academic Education Stage for 7 (seven) semesters, then continued to the Professional Education Stage for 4 (four) semesters, so that all of it takes place in 11 (eleven) semesters. The Bachelor's Degree Study Program of Medicine Curriculum of the Faculty of Medicine, Universitas Brawijaya is a curriculum that positions the SKDI-2012 competency area as **a learning block theme (Instructional Block Theme).** The curriculum contains a series of block themes that support the learning of related competency areas throughout education, arranged with an integrated longitudinal structure so that the competencies expected can be achieved at the end of medical education. This is in line with the regulation of the Chancellor of the University of Brawijaya number 34 of 2020 concerning the curriculum of the Independent Study Program-Independent Campus Article 7 concerning Outcome-Based Education.

An integrated longitudinal curriculum structure is a curriculum that teaches a theme continuously throughout education, although with different topics, in different semesters, and with different examiners and settings. One topic is a prerequisite for the topic in the following semester. All topics are integrated, taught, and evaluated in one block.

In this curriculum, there are seven themes of instructional blocks that are attached to the blocks in it **(Figure 4.1)**. Each block theme is then arranged longitudinally from semester to semester **(Table 4.2)**. The philosophy contained therein is that a theme is learned from the beginning of the lecture, while the evaluation is carried out in stages according to the level of competence required for each stage of education. The development of competency levels is structured in such a way that complete competence will be achieved at the end of medical education (Table 4.3).

In each clinical block, the curriculum structure is arranged vertically (preclinical and clinics) and horizontally (preclinical, clinics). Nevertheless, learning from one block to another remains a longitudinal curriculum as long as the competency theme of each block is the same.

In addition to general blocks, there are blocks that are specifically designed to help achieve curriculum goals, namely doctoring. **Doctoring** is a Competency Course aimed at helping students achieve integral doctor competence including mastery of knowledge and skills, effective communication, clinical skills, and reasoning as well as professional attitudes and behavior as a doctor as a whole under the supervision and constructive feedback from lecturers with an integrative, contextual and participatory-developmental learning approach. Doctoring uses a case-based learning approach by integrating all competencies, especially communication, physical examination, application of *basic medical sciences* in clinics, and *clinical reasoning*.

The entire block given is carefully arranged so that the continuity of competence is maintained while taking into account the burden of students every semester. The result is a curriculum map as shown in **Table 4.4**.

	High Professionalism Theme
	Introspection & Self-Development Theme
	Effective Communication Theme
	Information Management Theme
	Medical Scientific Foundation Theme
	Clinical Skills Theme
	Health Issues Management Theme

Figure 4.1 Instructional Theme

Figure 4.1 is described as follows:

- The theme of the Block 'Sublime Professionalism' is taught through bioethics, Medical Law, The Basics of Professionalism, Patient Safety, and Medical, as well as in Clinical Rotation / Community Rotation.
- The Block theme 'Self-Aware & Self-Development' is taught through Methodology, Final Task, and Elective Programs.
- The theme of the Block 'Effective Communication' is taught through generic skill 1 courses consisting of Communication Basics and History Taking, and Basic Physical Examination. Also taught in Advanced Communication (Generic Skill2) which is integrated into learning the application of Basic Medical Science (Basic Medical Science) in the clinic (clinical reasoning) in the form of Problem-Based Learning (PBL), as well as integrated into Clinical Rotation and Community Rotation.
- The theme of the Block 'Information Management' is taught through the theme of integrated blocks, especially in Methodology (scientific communication), management of Public Health problems (communication in society), and Effective Communication (doctor-patient relationship, doctor-other colleagues relationship), Entrepreneurship Block, as well as in extracurricular activities on the use of information technology in learning, for example, the use of search engines in learning.
- The theme of the Block 'Scientific Foundation of Medicine' is taught in the blocks of Basic Medical Science and Integrated Clinical Medicine and Clinical Rotation / Community Rotation. Longitudinally, these blocks represent the Competence of Medical Scientific Foundation, but actually, each of these blocks is a vehicle for learning all competencies in an integrated manner in lectures, tutorials, and clinical skills training, each following the topic of the block and the specified level of competence.
- The theme of the Block 'Clinical Skills' is taught through the learning of Generic Skill-1 (History Taking, Basic Physical Examination), in System-Based Skills on each system-based block, on the learning of Clinical Testing which includes Anatomical Pathology, Clinical Pathology, Radiology, Medical Rehabilitation, on learning Diagnostic Procedures in each block according to Clinical Skills in the relevant SKDI, and on Clinical Rotation / Community Rotation.

- The theme of the 'Health Problem Management' Block is taught through the longitudinal block of Public Health Sciences and Preventive Medicine, also in the Clinical Rotation / Community Rotation.
- In addition to competency courses, curriculum mapping also included mandatory personality courses set by Brawijaya University, including Religion, Citizenship, Pancasila, Bahasa Indonesia, and Student Field Work Program (PKNM).

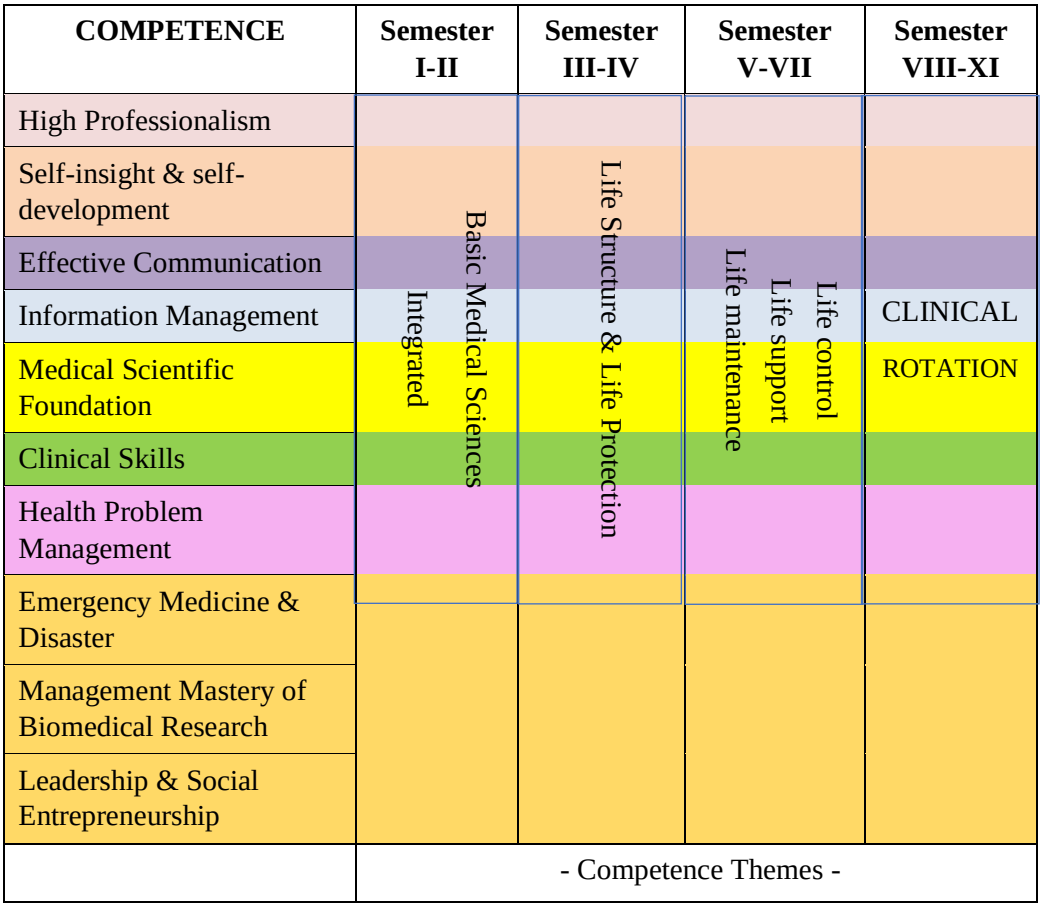


Figure 4.2 Competence Themes Longitudinal Block in Integrated Block

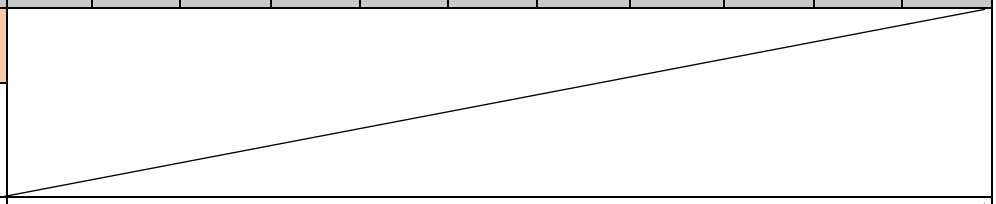
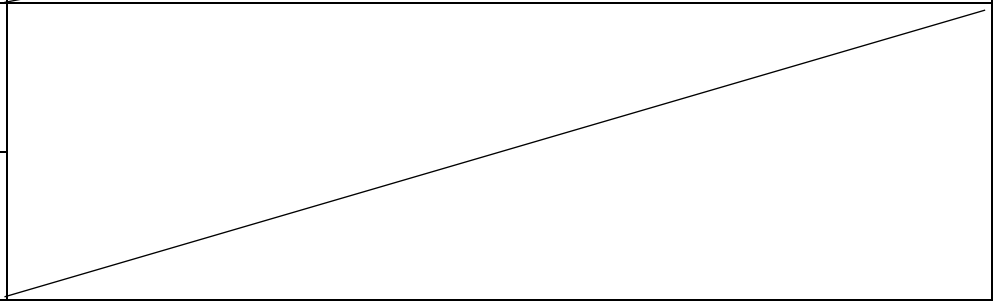
Competency	Academic Stage							Profession Education Stage			
	BMS		Clinical Medicine					Clinical Rotation			
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
High Professionalism											
Self-awareness & Self-development											
Information Management											
Medical Scientific Foundation											
Clinical Skills											
Health Problem Management											
Vertical Integration (Spiral)											
Competency Level (Miller)											
Competency Level (Dreyfus)											

Figure 4.3 Development of Longitudinal Curriculum Competence Level

Areas of Competence	**ACADEMIC STAGE**							**PROFESSIONAL STAGE**
			Clinical Medicine					Clinical Rotation
			Life structure	***Life protection***	***Life control***	***Life support***	***Life care & maintenance***	
	SMT I	SMT II	SMT III	SMT IV	SMT V	SMT VI	SMT VII	SMT VIII-XI
High Professionalism	Bioethics & Medical Law (2)	-	Patient Safety 1 (1)	Patient Safety 2 (1)		Patient safety 3 (1)	Forensic (3)	
				Method 2 (2)	Method 3 (2)			
				Elective 1 (2)	Elective 2 (2)			
	Doctoring-1 (1)		*Doctoring-2 (1)*	*Doctoring-3 (1)*	*Doctoring-4 (1)*	*Doctoring-5 (1)*	*Doctoring 6 (1)*	
	Basic Com/ History Taking (2)	Basic Physical Education (2)						
	Longitudinal Integrated in Communication, Methodology and Doctoring							
	BMS 1, 2a .2b, 3	BMS 4a, 4b. 4c, 5, 6	Muscular 1, Muskulo 2 Integument	Hematology, Endocrine, Tropical Diseases &Infection, Life cycle 2	Nerves, Psychiatry, Eyes, ENT	Cardio-vascular Gastro-entero respiration	Hepatology Reproductive Urology	
	3 + 2 + 2 + 2	3+2+2 +2+3	4 + 3 + 5	4,5 + 2,5 +2 + 2	6 +3+3,5+3,5	5,5 + 5,5	6,5 + 3,5 + 4	
	Procedural, Clinical Test & Interpretation, Therapeutic Skill							
	-	Clinical test & Clinical Procedure (2)	Included in the Competency Course system	BLS & disaster medicine (2)	Included in the Competency Course system	Anesthesia (2)	Clinical Approach to pediatric (2)	
			Based on Block Theme			Based on Block Theme		
			IKMKP 1, 2			IKMPKP 3		
			2 + 2			2		
General Courses (MKU) University Compulsory		Indonesian (2) Pancasila (2) KWN (2)						
Biomedical Research	Integrated into Methodology, TA, and Student Affairs							
				PHC (2)				
	Integrated into MKK PS in Semesters 3, 4, 6 and Doctoring							
Leadership & Social Entrepreneurship			Entrepreneurship (2)				Integrated into PKNM	
Study Load 148 credits	20	22	20	19	21	23	23	STUDY LOAD 47 credits

Figure 4.4 FMUB Medical Study Program Curriculum Map

4.2. Academic Education Stage Curriculum

The Academic Education Stage includes sub-stages of Basic Medical Science (Basic Medical Sciences) for 2 semesters, namely Semesters I and II, and sub-stages of Clinical Sciences (Clinical Sciences) 5 semesters namely Semesters III, IV, V, VI, VII. Meanwhile, the Academic Education stage has a total study load of 148 credits with each semester having a study load of 20 - 23 credits.

4.2.1. Sub-stage of Basic Medical Science (BMS) consists of:

a. Competence of Medical Scientific Foundation, in 6 BMS Blocks.
   1. BMS block 1 (3 credits) includes Biochemistry, molecular biology, and cellular biology.
   2. BMS blocks 2a and 2b (4 credits) include the Structure and function of organs.
   3. BMS block 3 (2 credits) includes the beginning of life aging process fluid balance and symptomatology.
   4. BMS block 4 (7 credits) includes Microbiology (3) Parasitology (2) and Immunology (2).
   5. BMS block 5 (2 credits) includes Biopathology (general pathology and inflammation, reparative process, neoplasia).
   6. BMS block 6 (3 credits) includes Pharmacodynamics, pharmacokinetics, ANS, basic toxicology, and drug development, particularly herbs.

b. Competence of Professionalism, given in the Courses of Bioethics and Medical Law (2 credits), some Religious Mk (2 credits), MK Citizenship (2 credits), and Pancasila (2 credits).
   1. Competence of Introspection/Self-Development, in Methodology 1 (2 credits) course.
   2. Clinical Skills Competence, in Doctoring, includes Communication Basics Courses and Basic Physical Examination Courses (4 credits).
   3. Other general courses, namely Indonesian Language (2 credits) and English (2 credits) are included in Competence c and d.

4.2.2. Sub-stage of Clinical Sciences consists of:

a. The competence of the Medical Scientific Foundation is arranged following the theme:
   1. Life Structure
      a. Musculoskeletal Life Structure (7 credits)
      b. Integument (5 credits)
   2. Life protection
      1) Life protection Haematology & Limforeicular Tissue (4.5 credits)
      2) Endocrine and Metabolic Diseases (2.5 credits)
      3) Anesthesia (2 credits)
      4) Tropical Medicine (2 credits)
   3. Life Control
      1) Life Control Nervous system (6 credits)
      2) Psychiatry (3 credits)
      3) Eyes (3.5 credits)

4) ENT (3.5 credits)

4. Life Support
1) Cardiovascular System (5.5 credits)
2) Respiration (5.5 credits)
3) Medical & Forensic Medicine (2 credits)

5. Life Care & Maintenance
1) Urogenital System (3.5 credits)
2) Gastro-Enterology & Hepatology (6.5 credits)
3) Reproduction (4 credits)

- Professional Competence, in the Patient Safety Course (3 credits) given in 3 semesters, 1 credit each in semesters 3, 4, and 6.
- Self-Introspection/Self-Development Competence in Methodology 2 (2 credits), Methodology 3 (2 credits), Final Project Implementation (6 credits) and Elective Program (4 credits).
- Effective Communication Competence, in Doctoring 2-6 (Clinical Reasoning & Put All Together) (5 credits).
- Competency in Clinical Skills, Procedural, Clinical Test & Interpretation, Therapeutic Skill (2 credits), Anesthesia (2 credits), BLS and disaster medicine (2 credits) and Clinical Approach to Pediatrics, in addition to what is taught in each MKK.
- Management of Health Problems (Individual & Community), in IKM-KP Courses 1, 2 and 3, (2 credits each).
- Local content as the flagship of PSSKed, namely (i) Biomedical Research covered in Methodology and Final Projects (12 credits), (ii) Emergency Medicine and Disaster Management included in the Competency Course Block (MKK) PHC-DM (2 credits) and also has been covered in the Competency Course Block (MKK) other appropriate systems, and (iii) Entrepreneurship is given in the MK Entrepreneurship (2 credits). In addition, several MK Doctoring has also been developed to accommodate biomedical materials, emergency medicine & disaster management; social entrepreneurship & collaborative leadership.

The curriculum content in PSSKed has been adjusted according to the stage of student competency development. Cognitive components, theoretical knowledge, and biomedical knowledge are more dominant in stage I. However, these components are gradually reduced by the introduction of applied knowledge and clinical science as well as psychomotor components and professionalism in stage II until the end of academic education **(Figure 4.3).**

The contents of the curriculum in each Clinical Competency Course are coordinated by the respective Course Coordinator (PJMK) with the obligation to refer to the Clinical

Situation Index (ICS) for individual health care services, List of Subjects, List of Clinical Skills, and List of Diseases listed on Indonesian Doctor Competency Standards (SKDI – 2012) according to the specified competency level.

4.2.3. Distribution of Themes and Curriculum Content into Semesters

Table 4.1 Distribution of Themes and Curriculum Content in Semester

No	NAME OF COURSES	CONTENTS/CORE MATERIALS	CODE	CREDITS
Semester 1 Basic Medical Sciences				
1	Basic Medical Science 1	Cell Biology, Biochemistry, Molecular Biology	DAA61001	3
2	Basic Medical Science 2-A	Structure and Function 1	DAA61002	2
3	Basic Medical Science 2-B	Structure and Function 2	DAA61003	2
4	Basic Medical Science 3	*Life cycle 1*, nutrition, aging, embryology	DAA61004	2
5	Religion: - Islam - Protestant - Hindu - Buddhism	Application of Religion in the Doctor's Profession	MPK4001 MPK4002 MPK4003 MPK4004 MPK4005	2
6	Doctoring 1	*Being A Good Doctor*	DAA61005	1
7	English	English and the World of Medicine	DAA61006	2
8	Bioethics and Medical Law	Law, Ethics, and the Doctor's Profession	DAA61007	2
9	Communication	*History taking*	DAA61008	2
10	Methodology 1	The basics of scientific thinking	DAA61009	2
	Total			20
Semester 2 Basic Medical Sciences				
1	Basic Medical Science 4 A	Microbiology	DAA62010	3
2	Basic Medical Science 4-B	Parasitology	DAA62011	2
3	Basic Medical Science 4-C	Basic Immunology	DAA62012	2
4	Basic Medical Science 5	General Pathology, inflammation, repair process, neoplasia	DAA62013	2
5	Basic Medical Science 6	Pharmacodynamics, pharmacokinetics, ANS, Toxicology, Herbal medicine development	DAA62014	3
6	Basic Clinical examination	Basic Clinical Skills	DAA62015	2
7	Clinical test & Procedure	Basic surgery, basic oncology, basic radiology, radiotherapy, radiodiagnostics, clinical pathology	DAA62016	2

No	NAME OF COURSES	CONTENTS/CORE MATERIALS	CODE	CREDITS
8	Civic Education	Civic Education	MPK4006	2
9	Indonesian Language	Indonesian Language	MPK4007	2
10	Pancasila	Pancasila	MPK4008	2
	Total			22
Semester 3 Life Structure				
1	Musculoskeletal System 1	Sistem Muskuloskeletal 1	DAA61017	3
2	Musculoskeletal System 2	Sistem Muskuloskeletal 2 + skill	DAA61018	3+1
3	Integumentary System 1	Integumentary System 1+ skill	DAA61019	3
4	Integumentary System 2	Integumentary System 2	DAA61020	2
5	IKM – KP 1	Public Health Sciences and Preventive Medicine 1	DAA61021	2
6	IKM – KP 2	Public Health Sciences and Preventive Medicine 2	DAA61022	2
7	Patient Safety 1	Patient Safety 1	DAA61023	1
8	Doctoring 2	Based on themes	DAA61024	1
9	Entrepreneurship	Entrepreneurship	DAA61025	2
	Total			20
Semester 4 Life protection				
1	Hematology System 1	Hematology and lymphoreticular 1	DAA62026	2
2	Hematology System 2	Hematology and lymphoreticular 2 + *skill*	DAA62027	2,5
3	Endocrine System	Endocrine -metabolic + skill	DAA62028	2,5
4	Tropical Diseases and Infections	Tropical Diseases and Infections	DAA62029	2
5	PHC & Disaster Medicine	Pre Hospital Care & Disaster Medicine	DAA62030	2
6	Methodology 2	Biostatistics, critical review, Evidence-Based Medicine	DAA62031	2
7	Life cycle -2	Perinatology, Child Development Disorders, geriatrics, and gerontology	DAA62032	2
8	Patient safety 2	Patient safety 2	DAA62033	1
9	Elective 1	Based on interests	DAA62034	2
10	Doctoring - 3	Based on themes	DAA62035	1
	Total			19
Semester 5: Life Control				
1	Psychiatry	Psychiatry + skill	DAA61036	3
2	Eye Sense System	Eye + skill	DAA61037	3,5
3	ENT Sense System	ENT + skill	DAA61038	3,5
4	Nervous System 1	Nervous System 1	DAA61039	3
5	Nervous System 2	Nervous System 2 + skill	DAA61040	3
6	Methodology 3	Thesis Proposal Preparation	DAA61041	2
7	Doctoring -4	Based on themes	DAA61042	1

No	NAME OF COURSES	CONTENTS/CORE MATERIALS	CODE	CREDITS
8	Elective – 2	Based on interests	DAA61043	2
	Total			21
Semester 6 Life support				
1	Cardiology 1	Cardiology 1	DAA62044	2,5
2	Cardiology 2	Cardiology 2 + skill	DAA62045	3
3	Respiratory 1	Respiratory 1	DAA62046	2,5
4	Respiratory 2	Respiratory 2 + skill	DAA62047	3
5	Anesthesia	Anesthesia + Cardiopulmonary Resuscitation	DAA62048	2
6	IKM KP 3	Public Health Sciences and Preventive Medicine	DAA62049	2
7	Patient Safety -3	Patient Safety -3	DAA2050	1
8	Final Project Writing		DAA62051	6
9	Doctoring 5	Based on themes	DAA62052	1
	Total			23
Semester 7 Life Care & maintenance				
1	Gastroenterology 1	Gastroenterohepatology 1	DAA61053	3
2	Gastroenterology 2	Gastroenterohepatology 2 + skill	DAA61054	3,5
3	Urogenital	Urogenital + skill	DAA61055	3,5
4	Reproduction 1	Reproduction 1	DAA61056	2
5	Reproduction 2	Reproduction 2 + skill	DAA61057	2
6	Approach to Paediatrics	Clinical Approach to Paediatrics	DAA61058	2
7	Forensic	Forensic Medicine	DAA61059	3
8	Doctoring 6	Based on themes	DAA61060	1
9	PKNM	Student Field Work Program	DAA61061	3
	Total			23
	Total of credits in 7 semesters		148 credits	

CHAPTER V
TEACHING AND LEARNING PROCESS

5.1. Limitations

A. Block

A block is a set of teaching materials (curriculum content) that is taught to achieve the same learning objectives. Based on learning objectives, blocks are divided into 2 types, each Competency Learning Theme Block (Instructional Block Theme) and Competency Course (MKK) Block. A block is the smallest unit in a semester that aligns competence (cognitive, psychomotor, and affective) according to the topic of each block.

Competency Learning Theme Block (Instructional Block Theme)

Theme Block is a block that includes a collection of teaching material topics that are arranged and studied longitudinally from semester to semester throughout medical education. The theme block aims to produce a complete mastery of one competency area. Because the Competency Standards of Medical Doctors in Indonesia cover seven competency areas, the curriculum structure in the PSSKed-FMUB also carries out seven Competency Theme Blocks.

Competency Course Block (MKK Block)

The MKK block is a block that includes a number of disciplined courses (MKDI) that are taught in an integrated manner. Learning Block MKK aims to achieve certain knowledge (cognitive) and clinical skills. In the structure of the PSSKed-FKUB curriculum, there are 2 types of Blocks, namely the Basic Medical Science Block and the Clinic Block. Learning Block Basic Medical Science is intended to achieve mastery of Basic Medical Sciences which is the basis for mastering clinical science (Clinical Medicine). Clinical Block Learning aims to achieve mastery of clinical knowledge and skills for every system of the human body. Each Competency Learning Theme Block is coordinated by the Course Coordinator (PJMK).

B. Microsystem

A microsystem is a small cycle in the rotation of clinics in a part of a clinic. The cycle is cross-learning in polyclinic (outpatient), ward (inpatient), medical emergency unit (emergency care), intensive care unit, and critical care unit (critical care), palliative, and terminal (end of life care). This block is done at the professional stage of education, but at MK Elective, the activities of students who take elective MK in the Clinical Department follow this pattern.

C. Longitudinal Learning

Longitudinal learning is continuous learning between topics of a block of competency themes, throughout physician education. This learning results in the gradual or gradual mastery of one particular competency from Miller 1 to Miller 4 or from novice to mastery (Dreyfus).

D. Integrated Learning

Integrated learning is the process of learning in a block integrated between the courses of related disciplines, to achieve mastery of the science and clinical skills related to each human

body system. Integrated learning can be vertical integration (preclinical-clinic) or horizontal (preclinical and clinics).

5.2. Main Approaches in Teaching and Learning Process

PSSKed FMUB applies SPICES and doctoring curriculum approaches to conduct the teaching and learning activities.

A. *SPICES*

Spices approach implementation includes learning that is Student-centered, Problem-based, Integrated, Community-oriented, Elective, and Systematic.

Student-Centered Learning

The learning approach is embodied in module assignments, tutorials, and various other self-help tasks. Thus, students are expected to no longer make lecturers the only source of learning. Information/learning materials can be obtained in addition to teaching lecturers, can also be obtained from the internet, libraries, discussions/tutorials, related sources, or learning experiences in the field. Lecturers, in addition to teaching also become facilitators for students to facilitate access to information/knowledge or sharpen (enrich) the information obtained to focus more on achieving learning goals (learning objective).

Problem-Based Learning

The learning approach starts with a problem or problem. Problem-based learning approaches are very important in student learning. The student's job as a picture of the doctor's task is to find and identify the main problems behind the complaints heard from the patient as well as from the physical signs found in the patient's physical examination. "Problems" are the first thing faced when doctor education students graduate and start working in a real setting in the community. The patient comes to a doctor to convey his "problem" both the syndrome and the symptoms he is experiencing.

Integrated Learning

Horizontal integration (preclinical, clinics) and vertical integration (preclinical) can provide students with a comprehensive and holistic understanding of the disease, pathophysiology, and treatment principles for patients. Vertical integration allows early clinical exposure so that students will be more interested in the following learning because they understand the relevance of what they learn in preclinical to their needs later when becoming a doctor (clinic).

Community Oriented Learning

A community-based learning approach is particularly relevant in general practitioner education. Cases in community and family medicine are evidence-cases in primary health care learning that become basic competencies for GPs. Hospitals, in general, have

developed as secondary and even tertiary service centers (for example: dr. Saiful Anwar-Malang Hospital), so primary service competence is increasingly difficult to obtain.

Elective

An elective program is an intracurricular program that must be followed by all students, but students choose topics/themes among a number of topics/themes provided by the Study Program. Students are given the freedom to choose according to the student's desire to learn more in accordance with the ideals or plans in the future when he becomes a doctor.

Systematic

The learning approach is systematically intended to train students to use systematic steps in dealing with "problem-based" in everyday practice, ranging from finding and identifying real problems, and analyzing the causation of these "problems" to the basis for problem-solving. These systematic learning steps are very in accordance with the steps in the daily practice of doctors (clinical procedures). These steps also underlie effective communication in relationships with patients.

5.3. Principles of Teaching and Learning Process of Competency Course

Consistent with the curriculum structure, the core of the competency teaching and learning process is **integrated longitudinal learning.**

a. Each competency area is an Instructional Block Theme that is taught longitudinally from the first semester of the Academic Education Stage to the final semester of the Professional Education Stage.
b. Learning one competency longitudinally means that all topics are part of one competency theme block. One learning topic in one semester is a continuation of the topic in the previous semester and becomes a prerequisite for learning on the topic of the next semester, and so on until the end of medical education.
c. Competencies are taught in an integrated manner in clinical blocks from semester III to VII. In this Clinical/System Block learning, competency mastery is the outcome of the integration of competency components as follows:

    1) Medical Scientific Foundation is a component of cognitive knowledge in the form of mastery of essential concepts (knows) of basic medical science, basic medicine, clinical medicine, health management science and community medicine, as well as how these concepts interact which are developed as a form of reasoning. critical thinking (know-how/critical thinking) is an evidence-based theoretical basis that forms the basis for clinical practice, particularly for interpreting and analyzing the results of history taking/data gathering and physical examinations, proposing appropriate clinical examinations to support proper diagnosis, and determining clinical decisions in a clinical decision making/clinical reasoning and clinical intervention.
    2) Clinical skills as the basis for performing clinical procedures include;

a) History taking & building interpersonal relationships
b) Physical examination
c) Clinical & diagnostic procedures (including understanding indications, contraindications, advantages and limitations and interpretations)
d) Intervention/therapy procedures
e) Diagnosis and differential diagnosis (Clinical Reasoning)
f) Medical data recording
g) Communication, Counseling, Education and Information to patients/community

3) Professionalism Competence, which includes;
a) Professionalism, as the basis for growing the affectionate doctor-patient relationship
b) Information Management, as the basis for developing service capabilities to patients through the use of Medical Information Technology and evidence-based medicine
c) Self-care and patient safety

d. Competency learning is in accordance with the principle of a longitudinal curriculum which is carried out in stages (according to the stage of medical education) according to the increase in the level of competence achieved so that at the end of education the competency level of 'Does' (Miller) or 'Competent' (Dreyfus) is obtained (See **Figure 5.1**).

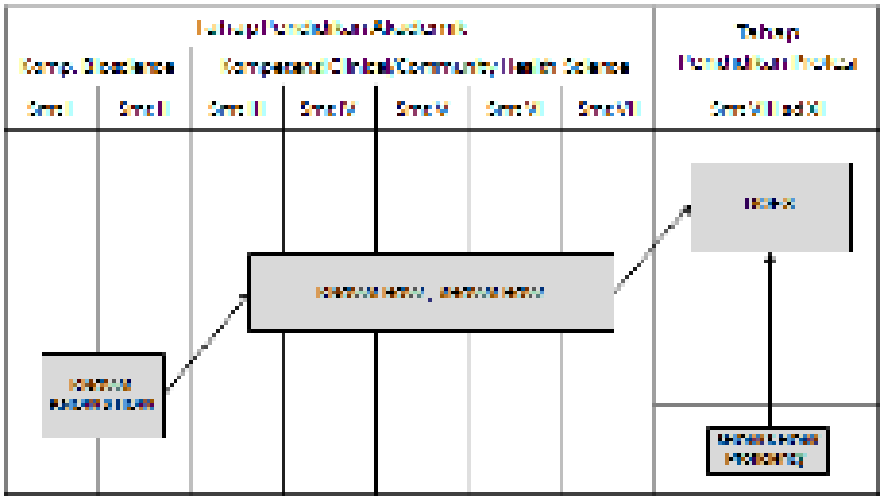


Figure 5.1 Stages of Achievement of PSSKed-FMUB Medical Education Competencies

e. Featured Competency Learning
1. PHC-DM Learning (Pre-Hospital Care & Disaster Medicine)
PHC-DM learning is a form of Implementation of superior competence in medical emergencies. PHC-DM learning is given in MKK PHC-DM in semester 4. In addition, PHC-DM learning is also integrated into MKK Doctoring in semesters 3-4.

2. Social Entrepreneurship and Leadership Learning

Social Entrepreneurship and Leadership learning is the implementation of the featured competencies of Social Entrepreneurship and Leadership that leads to self-development and mindset to identify opportunities to make innovations in the field of appropriate medical science and technology so that medical science is increasingly advanced under the demands of services/stakeholders. Social Entrepreneurship and Leadership learning are given in the Entrepreneurship MKK in semester 3 by emphasizing applying for work in accordance with the knowledge gained, namely the medical profession.

In addition, Social Entrepreneurship and Leadership learning are also integrated into PKNM in semester VII and in PBL learning methods throughout the academic stage to train leadership in groups. In addition to PKNM which is an intracurricular program, the implementation of Social Entrepreneurship and Leadership learning is also introduced to students' non-academic activities since the beginning of students entering the Faculty of Medicine. These activities are Introduction to Campus Life for New Students (PK2MABA) before the start of the first semester of lectures, Student Character Development (BKM) in the first year of lectures, and Community Service (Pengmas) at the end of the first year.

f. Integrated Excellent Learning.
   As a policy implementation to realize graduates who have competitive competitiveness, developed several learning models that are very elaborative/integrative by involving contributors to learning across Departments and interests. Some of the excellent integration learning in question include:
   1) Pembelajaran *"Doctoring"*,
   2) In accordance with the spices learning principles outlined above, PSSKed designed an integrated longitudinal learning model called Doctoring learning (learning "to be a doctor"). This model is an adaptive model of the learning model of the same name that was originally developed at UCLA, UNITED STATES. Doctoring in PSSKed is modified in accordance with the results of the analysis of the situation and conditions and the vision of the institution by elaborating on 3 principles of modern education, namely integrative, contextual, and participatory-developmental / longitudinal (Figure 5.2). This doctoring learning also includes strengthening the special competencies of PSSKed namely Pre-Hospital Care and Disaster Management (PHCDM).
      a) It is called **Integrative** (especially in Semester III onwards) because learning concerns all areas of competence according to the theme of system blocks in the current semester (horizontal &vertical integration at once). Each MKK Doctoring consists of a minimum of 5 modules, namely; 1) Disease Module & Clinical approach in Primary services; 2) Emergency & Patient Safety Module, 3) Professional Development, 4) Communication Module and 5) Practical Medical Skills Module.

b) **Contextual**, meaning that The Doctoring Block can be seen as an Enrichment Course that becomes a place for learners to learn applicatively competency materials that have been adjusted as real as possible to the environment in which a primary service doctor works both not only in the context of individualized health services in primary and referral health service institutions, but also in the context of public health services. Through field visit activities, simulations, and projects, this Doctoring block is expected to be a link between classroom learning and the real conditions in which doctors work.

c) **Participatory-Developmental/Longitudinal**, because doctoring learning is designed as a link between MKK in one semester and between MKK in the semester before and after. In addition, the elaboration of reflective learning, interactive learning, and constructive feedback by lecturers/ceptors/facilitators, peers, simulation patients, and other professions of Doctoring learning that runs every semester (Doctoring 1 to Doctoring 6) is expected to realize the process of **self-development in forming a doctor's professional identity (the process of becoming a doctor)**. Rime (Pangaro, 1999) and Dreyfus models are used as references for competency development in doctoring learning. Further explanation of Doctoring can be seen in the Monograph on Doctoring Learning at FMUB and/or in each of the Doctoring Competency Course Books I s/d VI.

Competency			***Phase I Development***		***Phase II Development***		***Phase III Development***	
			Doctoring I	**Doctoring II**	**Doctoring III**	**Doctoring IV**	**Doctoring V**	**Doctoring VI**
			SMS I	**SMS III**	**SMS IV**	**SMS V**	**SMS VI**	**SMS VII**
			Doctor As Scholar & Scientist: Intellectual Reporter		***Doctor as Healthcare Practitioner (Healer): Interpreter-Junior Manager***		***Doctor as Universal Professional: Senior Manager & Educator***	
			PARTICIPATIF-DEVELOPMENTAL/LONGITUDINAL					
High Professional			+	+	++	++	+++	+++
Self-awareness and Self-development			+	+	++	++	++	++
Effective Communication			+++	+++	++	++	++	++
Scientific Foundation of Medicine			+++	+++	++	++	++	++
Applications of Biomedical Science in Medicine			+	+	+	+	+	+
Information Management &			+	+++	++	++	++	++

Scholarship: EBM Practice									
Clinical Skills			+	++	++	++	++	+++	
Management of Health Problems (Clinical Problem Solving, Patient Management)			+	++	+++	+++	+++	+++	
Emergency Medicine & Disaster Response *(Emergency Skill)*			+	++	++	++	++	++	

Gambar 5.2 Doctoring Learning Concept Framework

(SMS: semester, The number of + marks reflects the quantification of competency content)

3) Interprofessional Education & Collaboration Learning (IPEC)

Interprofessional Education & Collaboration (IPEC) is one of the outputs recommended in the 2015 WFME and the 2018 National Standard for Medical Education (Permenristekdikti no.18 of 2018) which mandates that the learning process is carried out with a comprehensive, collaborative practice-based interprofessional health education approach. The operational definition of interprofessional education according to WHO (2010) is learning in which two or more professions jointly learn about, from, and with (about, from, and with) one another to collaborate effectively to improve the quality of health services. In the PSSKed curriculum map, these outcomes are integrated into the MKK Doctoring from semesters I to VII and are realized in the Student Real Work Program (PKNM) in semester VII.

PKNM is one of the university content courses (intracurricular) with a load of 3 credits. PKNM is implemented as a form of field activity practice (PKL), where students will get a learning experience to interact directly with community groups or community partners in activities, and directly identify and try to take part in dealing with health problems faced by these community groups (community diagnosis). In principle, PKNM is a program that is closely related to community service activities aimed at community development in order to achieve sustainable healthy behavior. Activities in PKNM contain elements of community services (community services), community empowerment (community empowering), and community relations (community relations). PKNM was attended by all undergraduate students at the Faculty of Medicine, consisting of PS Medicine, PS Bachelor of Nursing, PS Bachelor of Nutrition, PS Pharmacy, and PS Midwifery.

In addition to PKNM which is an intracurricular program, the implementation of IPEC is also introduced students' non-academic activities since the beginning of students entering the Faculty of Medicine. These activities are Introduction to Campus Life for New Students (PK2MABA) before starting the first semester of lectures, Student Character Development (BKM) in the first year of lectures, and Community Service (Pengmas) at the end of the first year.

5.4. Learning Characteristics of Each Competency

5.4.1. High Professionality

Real professionalism is also a clinical skill. The professional learning process must start early at the beginning of medical education and continue until the end of the professional education stage.

Professionalism contains elements of cognitive, skill, psychomotor and especially effective assessment. Mastery of science (cognitive) and Clinical Skills, especially in effective communication (psychomotor), as well as a good understanding of medical ethics, medical ethics, and medicolegal (affective), underlie professional attitudes/behaviors.

Professional behavior consists of elements: altruism (concern for patients), accountability (individual doctor's responsibility towards his profession), and excellence (commitment to competence, lifelong learning, continuous self-development, and development of medical science).

5.4.2. Introspection and Self-Development

Learning Competence and Self-Development are (i) preparing prospective doctors to develop themselves as medical and health scientists, (ii) preparing them to follow academic education at a higher level, and (iii) preparing to enter the desired job market.

To achieve these objectives, the learning process includes Research Methodology/Research and Elective Programs. Students learn to systematically follow the basic steps of research, collect data, interpret and analyze data, develop hypotheses, and produce an academic view of a problem in the world of medicine and health as a basis for decision-making based on science.

Because self-education and self-development are competencies that must be achieved, students are required to produce final project research.

a. Final Project Supervision

1. Number of Supervisors:
   A student who carries out the Final Task is guided by two people consisting of 1 (one) person as Supervisor I and 1 (one) person as Supervisor II.

2. Selection of Supervisors:
   - The Dean selects Supervisor I and Supervisor II with a decree at the suggestion of the Final Task Team.
   - Supervisor II can come from outside the Faculty as long as necessary

- Extraordinary lecturers can be proposed as Supervisor I or Supervisor II.

3. Duties and Responsibilities of Supervisors:
   - The duties and responsibilities of Supervisor I are:
     1) Helping students in finding problems that are used as the basis for the preparation of the Final Task
     2) Guiding students in completing their Final Task research
     3) Guiding students in writing the Final Task.
   - The duties and obligations of Supervisor II are to assist Supervisor I and complete the supervision of the student's Final Task.

b. Elective Program

In general, the learning objectives of the Elective Program will be beneficial for study programs, students, and laboratories/department.

a. For study programs, the Elective Program will enrich the achievement of Introspection and Self Development, and Knowledge Development competency areas.
b. For students, the Elective Program is intended to provide opportunities to increase or deepen their medical knowledge, inside or outside the standard materials that must be mastered, according to their interests or following future career development plans as practitioners, researchers/developers of medical science, manager/leader/decision-maker/care provider in the clinic and especially in the community.
c. Laboratories/Departments, it is intended to provide opportunities and provide opportunities for students to deepen topics/materials deemed necessary by the Department/Laboratory but not enough space and time to be studied in Blocks.

The objectives of the elective program at BSPM-FMUB are as follows:

1. Achieve local competence of BSPM FMUB, which provides more competitiveness for the graduate medical profession, especially in the fields of biomedicine, emergency medicine & disaster management; social entrepreneurship & collaborative leadership
2. Prepare graduates to have competitive added value in further education and better preparation for specialization career paths
3. Provide opportunities for students to gain learning experiences and self-development as potential community leaders and professionals in the health sector.

Program Type

1. Main Elective Modul
   Main elective module

The main elective module is an elective module that characterizes the uniqueness of BSPM FMUB as a manifestation of the institution's vision and mission to produce doctors who have more abilities in mastering competencies.

Topics from the main elective modules include:

a) Emergency Medicine & disaster management (medical emergencies)
b) Clinical Medicine (specialization in 12 systems)
c) Join in FMUB's flagship biomedical research conducted by researchers
d) Social entrepreneur & collaborative leadership

2. Supporting Elective Modul

Supporting elective modules are elective modules that allow students to develop themselves according to their interests and talents that can add value and competitiveness as professionals in the health sector, such as developing leadership skills.

5.4.3. Komunikasi Efektif

In semester one, students learn communication skills in a particular block on the basics of medical communication (basic communication skills). Then, it is followed by advanced communication skills, which are integrated into the Indonesian course, English course, Bioethics & medicolegal course, System course, patient safety course, Final Project, and Doctoring course. The distribution of the material and its integration adopts and adapts the latest literature for teaching physician communication and is outlined in a conceptual framework for learning communication and professional behavior, as shown in **Figure 5.6.**

The distribution of materials is arranged as follows;

Materials in the competency course Basics of Medical Communication (Semester 1) include;

1. Intrapersonal Communication
2. Build an Impression and build relationships
3. Active listening and questioning skills
4. Mass Communication
5. Delivering bad news
6. General History-Taking Skill

Advanced communication materials (integration with system block, Patient safety, and Doctoring) include;

1. Communication with Family
2. Communication with different cultural backgrounds, including foreign languages
3. Communication with colleagues or other professions (PKNM & Doctoring)
4. Communication by telephone

5. Communication-related to referrals, including hands-off (delegation of responsibility and discharge of patients)
6. Handling complaints (Communicating with difficult people)
7. Communicating sexual problems
8. Communicating with pediatric and geriatric patients
9. Giving Information & Lifestyle Modification
10. Other content to be developed as needed

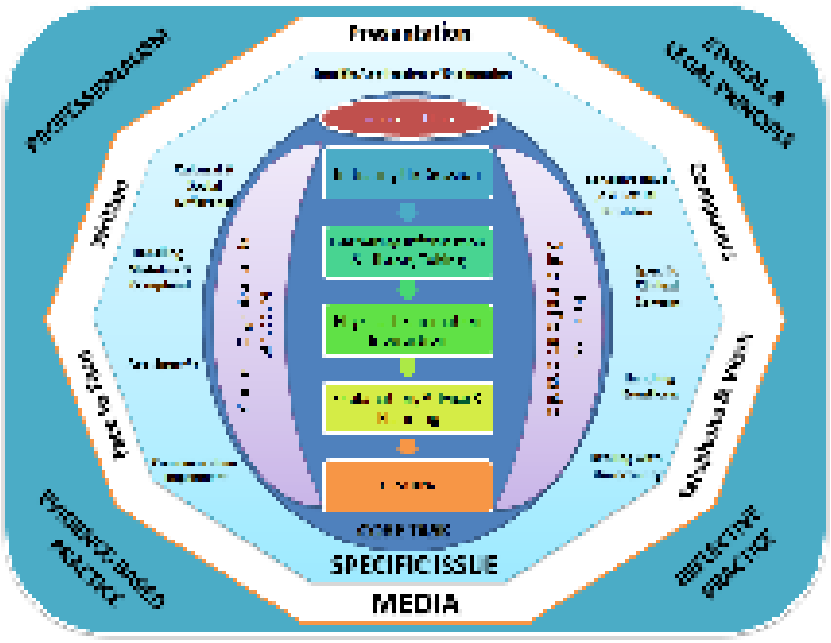


Figure 5.6 Conceptual Framework for Learning Medical Communication Skills at FMUB

5.4.4. Information Management

- Information Management Block themes are taught through other block themes, particularly in Methodology (scientific communication), Management of Public Health Problems (communication within the community), and Effective Communication (doctor-patient relationship, doctor-other colleagues relationship), as well as in extracurricular activities about search engine as the use of information technology in searching data/files or internet information for the teaching and learning process.
- Study Programs must prepare facilities/infrastructure for learning these competencies, such as virtual libraries (online and mobile), laptops and PCs for students, and educational management information systems.

- The rapid development of information technology makes the need for Academic Handbook to contain the development of Information Management Competence learning.
- For example, the Informatics Management Competence for Patient Care, conducted by the University of Florida School of Medicine, includes:
  - Able to identify the type of information needed in patient care (informed consent, medical records, clinical procedures, and others)
  - Able to access and compile medical information using electronic medical records (EMR/EHR);
  - Able to identify, evaluate, and use educational materials to patients appropriately in every health care place
  - Able to find and use clinical practice guidelines and determine the materials needed in the decision-making process.

- Competency in Management of Medical Science and Technology Information is expected to produce the ability to:
  - Assess the validity and reliability of health information via the Web or other media
  - Use Virtual Medical Library Resources, such as journals, books, and databases
  - Search for appropriate literature and use it as answers to research and clinical questions
  - Demonstrate skills in critically reviewing medical literature by applying the level of evidence in the decision-making process for patients.

5.4.5. Medical Scientific Foundation

- Learning is carried out in vertical and horizontal integration blocks involving laboratories/sections related to the block topic.
- Cognitive learning includes giving modules and module assignments, face-to-face lectures, and tutorial activities discussing module assignments.
- If there are Clinical Skills that are not taught to a student, reading assignments can be given, and so on, so that the principles in clinical skills are still learned and can be understood well.
- As a longitudinal curriculum, learning all explicit and implicit competencies is the responsibility of Blok as long as it follows the topic of the block and is carried out using a doctoring pattern.

5.4.6. Clinical Skills

- Psychomotor learning includes learning Clinical Skills (see List of Clinical Skills SKDI) conducted in the Skill Laboratory in collaboration with the Skill Laboratory personnel.
- Clinical Skills in the BSPM curriculum include:

1) Interpersonal communication skill
2) History taking
3) Basic Physical Exmination
4) Clinical Test and Procedure, namely skills to select, read, and interpret clinical and radiological laboratory examinations in general. Included in this skill group are the skills to understand and perform a number of basic clinical procedures such as aseptic technique, venipuncture, patient safety techniques, intramuscular/intravenous injections.
5) Clinical Information Management, namely skills in obtaining, conveying, researching, critiquing, and managing clinical information (medical records) from history taking and history taking to diagnose and explain clinical problems related to pathogenesis, develop differential diagnoses and study and demonstrate clinical reasoning and identify problems among patient complaints.
6) Diagnostic skills, namely the skills of selecting and performing clinical procedural actions to establish a diagnosis.
7) Clinical Intervention, namely the skills to choose and carry out appropriate clinical intervention actions, including prevention, treatment, and palliative measures.
8) Prognosis is the skill to determine the prognosis of the patient's disease based on his observations of the patient, the history of the disease, and the alternative interventions carried out.

- Clinical skills materials numbered 1 to 4 are taught in the first year of undergraduate medical education (Basic Medicine Stage).
- Clinical skill materials numbered 5 to 8 are taught through the related system competency courses in the second year to the end of undergraduate medical education (Clinical Medicine Stage).

5.4.7. Health Problem Management

- Competence is achieved through lectures, discussions, tutorials, assignments, modules, and community rotations. Considering that health problems, in general, are closely related to diseases and community environmental problems, the learning process is coordinated by the IKMKP Division/Laboratory.
- The topic of discussion following the SKDI in the Appendix "Management of Health Problems."
- The management of individual health problems in the Problem Management List in SKDI is taught in clinical blocks and clinic rotations.

5.5. Teaching and Learning Process in Academic Education Stage

5.5.1 Code of Conduct

a. Students are obliged to:

- Show official identity as a registered student following the BSPM FMUB (KTM) Academic Education Stage.
- Obey the rules and regulations related to academic education, administrative requirements (UKT, proof of registration, and others), academic requirements (KHS, KRS, and others), and fulfillment of obligations imposed on him (module assignments, and others), both issued by faculties, study programs, Lab skills, preclinical laboratories, and Course Coordinator.
- Participate in the learning process at the academic stage with full responsibility following academic regulations (Student Regulations from the Vice Dean III, Study Program provisions, laboratory provisions) and maintain good relations and communication with fellow students, teaching lecturers/supervisors, and administrative staff.
- Treat 'standard patients' as real patients regarding dignity, personal rights, decision-making, and others.

b. Students are entitled to:

- Participate in the entire teaching and learning process and assessment of the Academic Education Stage following applicable regulations.
- Use available learning facilities/infrastructure.
- Utilize the 'standard patient' as part of the learning process.

5.5.2 Learning Model

The outline of the learning model in the Academic Education Stage includes:

a. Strengthening cognitive abilities:

- Face-to-face lectures
- Module learning and module assignment
- Structured activities for small group discussions and tutorials

b. Strengthening of psychomotor abilities and attitudes/behaviors:

- Learning clinical skills in the clinical skills laboratory (Lab skills)
- Examination demo with a 'standard simulated patient' or mannequin
- Practicum in the laboratory
- Doctoring-1 & Doctoring-2 (History Taking, Physical Examination, Clinical Reasoning, Problem-based Learning)

In the Academic Education Stage, clinical skills learning is provided through simulations with role-plays and 'standard patients.' Each learning for this can provide and enrich the student learning experience. The choice of learning modality depends on the teaching objectives of what is to be achieved. (**See Table 5.3**)

Table 5.3 Examples of Clinical Skills Learning Modalities at the Academic Education Stage

Learning Modalities	Examples of Learning Experiences
	Obtain various clinical scenarios
	Practice Communication skills
	Practice Physical Examination skills
	Get feedback on performance
	Practice cast, pulmonary, mammary, and pelvic examination techniques
	Basic Practice of Procedural Skills
	Practice leadership & work in a team
	Demonstrate cardiac & pulmonary care
	Bioscience mastery application in clinical problem-solving
Trainer	Trainer Lumbar puncture, breast exam, prostate exam

CHAPTER VI
ASSESSMENT & EVALUATION OF LEARNING OUTCOMES

6.1. Assessment

6.1.1 Assessment Limitation

In this Academic Handbook, assessment is distinguished from evaluation of learning outcomes. Assessment is intended to measure (scoring) and assess (grading) learning outcomes/competencies. Measuring/scoring is an assessment process (tests, exams) using measuring instruments (questions, rating scale, and others.). The result of this process is called a score. Assessing (grading) is the process after measuring, namely converting the results of the measurement/score (score) into quality values (A, B, C, D, E).

6.1.2 Assessment Objectives

A good assessment aims to:

a. Determine the level of achievement of student learning objectives and graduation status at each stage of education (summative)
b. Provide feedback or input for students and educators to develop their learning abilities (formative)
c. Indicate certification or evidence of achievement of competence and or professional activities so that they can be trusted to carry out certain professional authorities (entrustable professional activities)
d. Increase student learning motivation to get better learning outcomes

6.1.3 Principles of Competency-Based Assessment in BSPM

To achieve the objectives of the assessment during the educational process, the assessment activities adopt the principles of assessment based on the latest medical education literature and legal principles in educational standards. The principles adopted are 1) defensible by meeting the utility rules (Formula U from Cees Van der Vleuten) and 2) integrative & longitudinal. A brief explanation of these principles is as follows:

6.1.3.1 Defensible by meeting the Utility rules

It is widely accepted in medical education to use the U (Utility) formula

$$U = V \times R \times E \times P \times A$$

Box 6.1 Utility Formulas for Good Assessment in Competency-Based Medical Education (van der Vleuten, 1996). U (utility), V (valid), R (Reliable), E (educational impact), P (practical & cost-effective), and A (acceptable).

A good assessment utility rule is an assessment that can meet the principles of validity (validity), reliability (reliability), educational impact (having an impact on the educational process), practical & cost-effective (can be applied in the existing education system), and acceptable (acceptable to stakeholders, both the process and the results).

a. Valid

The general definition of valid is that the assessment method must follow the objectives or character of the learning outcomes (it measures what should be measured). This principle applies that learning outcomes in Competency Courses (MKK) are assessed using a method that follows the nature of competence by referring to the Miller Pyramid concept as recommended in the Indonesian Doctor Competency Standards (**Figure 6.1**). By following the level on the Miller Pyramid, the assessment at PSSKed can fulfill the principle of authenticity in the SNPT, meaning that it is hoped that the assessment method chosen can represent the actual conditions in which competence is applied because the closer to the top, the assessment method applied will be closer to the actual conditions of the medical profession, the more complex and measuring more complex competencies. Efforts to ensure validity are carried out by compiling an assessment blueprint that will map learning achievements, assessment methods, and at the same time, the number of questions to be tested on students. This assessment blueprint is also a tool for the verification of questions before and after the implementation of the assessment (pre and post-administration assessment review).

Figure 6.1 Relationship Framework of Assessment Components, Assessment Level and Assessment Authenticity as a manifestation of validity adapted from Miller's Pyramid (Miller, 1990)

b. Reliable (Accurate)

The assessment method/instrument selection is followed by an analysis of its precision/accuracy to ensure that the student's response reflects the desired ability. The assessment team formed by the study program is tasked with conducting item analysis by evaluating the level of difficulty, discriminant index, reliability coefficient, and guessing index of questions after the exam.

c. Educational Impact (having an impact on the educational process)
In addition to providing information about the achievement of learning objectives, assessment should also be a motivation/trigger enthusiasm to learn optimally according to their abilities through a feedback mechanism on the results of the assessment.

d. Practical & cost effective (capable)

Assessment should also be a tool for institutions to apply the principles of effectiveness and efficiency in education management by providing learning outcomes that follow legal interests; for example, it can be immediately transferred to digital data from the Higher Education Database (PD Dikti).

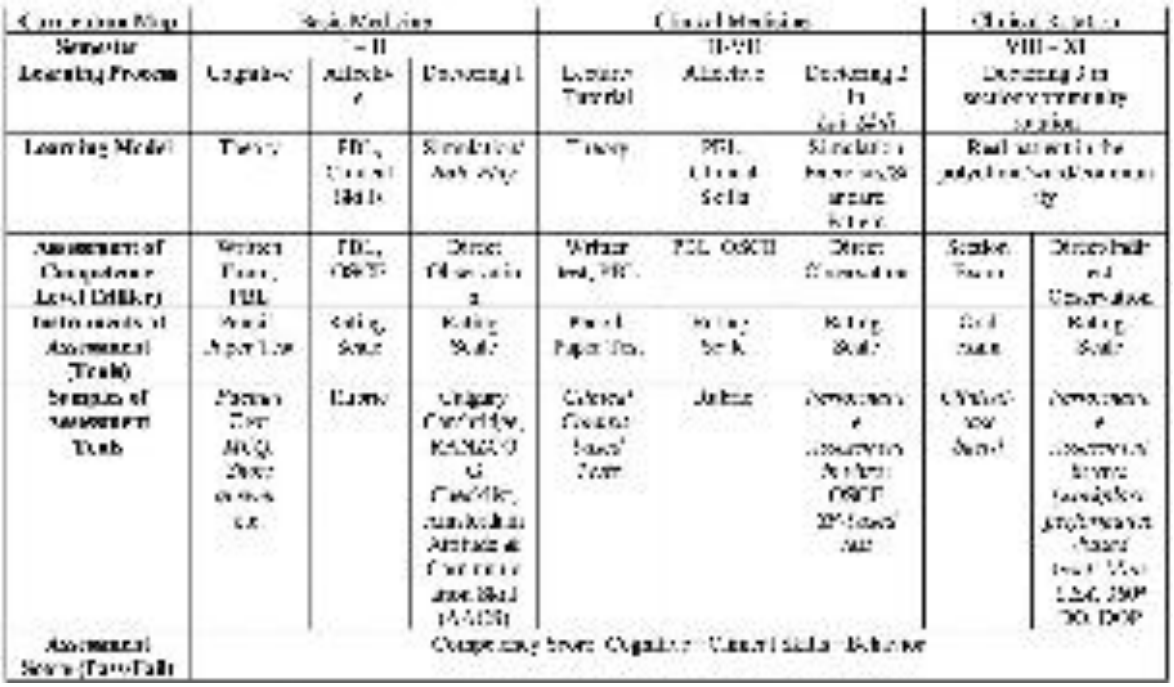
e. Acceptable (accepted by stakeholder)

Assessment methods and formulas are optimized to be accepted by stakeholders and students because of their feasibility and the combination of validity and reliability that suits their needs. Therefore included in this principle is the application of aspects of justice (fairness) and transparency (openness) in the assessment. Students are given the right to clarify how the series of assessment processes are carried out, how the standard-setting / graduation limit is implemented and how the graduation decision-making process is determined.

6.1.3.2 Integrative & longitudinal

Considering that the competency learning process is an integrated longitudinal learning process, the assessment process is also carried out in an integrated manner (covering all components of competence) and longitudinally (continuously, repetitively, and spirally), which is carried out for seven semesters of the undergraduate education stage (See **Table 6.1**).

Table 6.1 Longitudinal Curriculum and Competency Assessment



The principle of integration in the KBK assessment means that in every MKK, the achievement of completeness embodied in the MKK final score is always strived to consist of 3 components of competence, namely: (i) a cognitive component, (ii) a psychomotor component, and (iii) an affective component/professional behavior with different levels from one another according to the character of the learning outcomes described and designed in the assessment blueprint in the MKK/RPS book. Longitudinal refers to each stage as an achievement that becomes the foundation or important achievement for mastery at the next stage. Each stage systematically elaborates on the ten BSPM competency areas (**Figure 4.2** and **Figure 4.3**).

6.1.4 Assessment Methods and Instruments

Referring to the principle of validity, the competency course assessment is adjusted to the character of the competency component based on the best scientific evidence. Various assessment methods that can be used (**Figure 6.1**) include:

a. Cognitive component assessment is a written test-based assessment method (e.g., Essay, non-vignetted/vignetted MCQ, MEQ, EMQ) or oral test (viva exam, case response).
b. Assessment of psychomotor and affective components can be in the form of Direct Observation/Non-Direct Observation using either a rating scale or a checklist depending on the competency level/semester specified. This component assessment is characterized by a constructive feedback section for demonstrated performance. OSCE assessment methods, portfolio and workplace assessment methods such as MiniCex, DOPS, OSLER, MiniPAT,

CBD, MSF 360 degrees, etc. are examples of this type of assessment method (Levels 3 and 4 of the Miller Pyramid in **Figure 6.1**).

Table 6.2 Best Scientific Evidence-Based Medical Competency Assessment Methods (Miller, 1990; Norcini, 2007; Zubair,2012)

Assessment Level (Miller Pyramid Figure 6.1)	**Choice of Assessment Method**
Knows (Factual Knowledge & KnowHow (Clinical/Contextual Knowledge)	Various forms of Written Exams such as Long Essay, Short Essay, MCQ (Non or vignetted case), Extended Matching Item, Script Concordance Test (SCT), Key Feature, Some forms of oral exam (Viva).
Show How	Assessment method based on Performance Observation in standardized/simulated environment - OSCE - Oral Exam (Viva) - Clinical Case Presentation - Video Presentation - Project-Based Assessment - Behavior Checklist
Does	Performance-based assessment in the real/work environment (Workplace-Based Assessment); - Mini Clinical Examination (MiniCeX) - Direct Observed Procedural Skill (DOPS) - Behavior-Based Observational Checklist, such as Mini PAT - Case-Based Discussions such as Clinico Pathological Conference Discussions, Case Management reports, etc - 360-degree evaluation - Logbook - Portfolio

The detailed explanation of each assessment method in table 6.2 will be explained in the BSPM Student Assessment Standard Operating Procedure (SOP). The minimum completeness assessment/competency assessment is carried out in competency courses by combining different assessment results for each competency component (cognitive, psychomotor, and professional behavior). The generic formula for the final competency value is in box 6.2.

MKK Final Score = [(Weight1 x Average Cognitive Score) + (Weight2 x mean Psychomotor score) + (Weight3 x average value of Professional Behavior)]/ (Weight1 +Weight2 +Weight3)

Box 6.2 Generic Formula for BSPM MKK Final Value

The weight of the generic formula for the final grade is determined according to the percentage of competency component content applied to each stage & curriculum theme (CHAPTER IV). Therefore, considering the uniqueness of learning outcomes at each stage, the generic formula for calculating the final competency course (MKK) score can be adjusted by the course coordinator in coordination with the Head of the Study Program by involving the Curriculum Team & Assessment Team. Implementing policies in Permendikbud 03 of 2020 concerning National Standards for Higher Education and Decree of the Minister of Education and Culture of the Republic of Indonesia Number 754/P/020 concerning Main Performance Indicators of State Universities (IKU-PTN), one of which contains collaborative and participatory classes (IKU 7). The KPI 7 assessment focuses on implementing education with a case method and team-based project approach, with the evaluation criteria of 50% of the final score being based on the quality of class discussion participation (case method) and/or the final presentation of project-based learning. Therefore, during this transition period, we propose two alternative evaluation criteria to adjust the transition of learning methods in each course. Here are some alternatives for calculating the final MKK value in BSPM.

6.1.4.1 Basic Medical Sciences Assessment (BMS 1- 6)

In each of these blocks, 2 types of assessments are carried out:

a) Cognitive assessment consists of a) topic exams in the form of practice exams or tests on specific topics, b) midterm exams (UTS), which are conducted in the middle of the semester, and c) end-of-semester exams (UAS). This summative exam is given in the form of a written exam.
b) Psychomotor and affective assessment
   The Block Course Coordinator coordinates the method and number of exam questions in the MKK blueprint according to a load of teaching materials from each laboratory that is integrated into the block learning. In some MKK, the practicum in the BMS Block is not a specific competency. However, it is enrichment in the achievement of cognitive competencies for subjects integrated into a particular block that will strengthen clinical reasoning abilities. Not all integrated departments have to do a practicum, for example, because practicum topics are given in other blocks that are more relevant.
   1) If there is a practicum exam, the Department can conduct its assessment model or be categorized as a topic exam.
   2) If there is an OSCE exam, it is categorized as a skill test with a different score formula.
   3) The test results are coordinated to the Block PJMK to be used as material in determining the Block Exam Score.
   4) In the BMS Block exam, the results include only elements of the Medical Scientific Foundation competence because other competencies have not been involved in the learning process.
   5) The test results are in the form of scores converted into MKK Final Scores.

6) Two alternative general formulas are used to calculate test scores to be final ones. The selection of the formula for calculating the final grade is adjusted to the learning method applied in the lecture. The formulas are:

Alternative 1

Final Score of Basic Medical Sciences

$$= \frac{3\{\text{Average of } \textit{Case-based assessment}^{\#} \text{ and } \textit{Project Based Assessment}^{*}\} + 3\{(\text{average of topic exam-module} + \text{UTS}) + 2\text{x UAS}\}}{6}$$

*Project Based Assessment: presentations, practicum activity reports,

#Case based assessment: PBL, score of skills/clinical skills

Alternative 2

Final score of MKK BMS without skill component

$$= \frac{\{(\text{module-topic exam average}) + \text{PBL score} + 2\text{x (UTS)} + 2\text{x (UAS)}\}}{6}$$

Formula for Final Score of MKK BMS without skill component

Final score of MKK BMS with skill component

$$= \frac{\{(\text{ module-topic exam average}) + \text{PBL score} + 2\text{x (UTS)} + 2\text{x (UAS)} + \text{skill score}\}}{7}$$

Final score of MKK BMS with skill component

Box 6.3 Basic Medical Sciences Final Score Formula

6.1.4.2 ***Assessment of Problem Based Learning (PBL)***

- PBL is a form/integrative learning technique used to hone students' learning skills, critical thinking, clinical reasoning, and contextual thinking.
- The main objective of PBL learning is to develop student learning skills.
- PBL is held from Semester I to Semester VII
- PBL is organized by a PBL Team formed by the Department at the suggestion of the Study Program.
- PBL scores are obtained from the Process Assessment to assess the effectiveness of student learning and the output assessment to assess the mastery of learning materials.

- Process assessment is carried out using observation sheets and is carried out by tutors. The results of the assessment are Skill scores for learning skills.
- The output assessment is carried out using a summative exam administered by the PBL team.
- Calculation of PBL scores in each semester is carried out using the formula in box 6.4 as follows:

$$\text{PBL Score} = \frac{\text{Process Value} + \text{Task/output Value}}{2}$$

Box 6.4 PBL Scoring Formula

6.1.4.3 Assessment of Clinical Medicine Competency Course / System Competency Course (Semester II to VII)

Because the MKK/blocks in these semesters generally teach clinical science and skills, the assessments on the MKK/block systems in this semester can be divided into 2 types:

a) Cognitive assessment is carried out through written tests on topic exams and summative exams at UTS and UAS moments. The exam is conducted in the form of a combination of Vignette MCQ and non-Vignette MCQ questions with the same conditions as the Basic Medical Science Block exam.
b) Course Coordinator coordinates psychomotor and affective assessments for clinical skills with the Clinical Skills Laboratory (Skill-Lab) with the following provisions: 1) Clinical skills for medical education do not always reach the 'does' level, even most of them only reach 'knows how' or 'shows how.' Therefore, for clinical skills assessment: (i) Several types of assessment (multimodal assessment methods) are needed to determine the achievement of clinical competence. A single method will not describe the achievement of clinical skills, (ii) the validity of the assessment is determined by all assessment methods and cannot be carried out by only one assessment, and (iii) the selected assessment method needs to consider practical issues and can be carried out efficiently. The assessment includes an assessment covering the following generic components:
    1) History taking
    2) Physical examination
    3) Diagnostic procedures, clinical tests & their interpretation
    4) Diagnosis and differential diagnosis
    5) Non-pharmacological therapy
    6) Pharmacological therapy
    7) Communication, Information, and Education, including the use of IT in medical service information management
    8) Professionalism and patient safety

The assessment method is determined by PJMK, at least using an observation-based assessment method or at the show how the level of the Miller pyramid (Figure 6.1) such as OSCE, MiniCeX, Observation with a checklist involving mannequins, simulators or standard patients, and or equivalent methods. The passing score for OSCE is determined through the calculation of the "borderline regression method", to be calculated in the block final score formula. OSCE technical requirements are described in OSCE Standard Operation Procedures (SOP).

Table 6.2 Components of Clinical Skills Assessment Material

	Competency Area	Components of Clinical Skills Competency Assessment Material		
		Cognitive	Psychomotor	Affective
1	High professionalism	+	+	+ + Professionality
2	Introspection / Self-Development	-	-	-
3	Effective Communication	+	+ + *History Taking& physical examination*	+ + + Professional communication
4	Information Management	+ *Clinical Information Management*		
5	Medical Scientific Foundation	+ + *Clinical Reasoning Clinical Testing Clinical Intervention*	+ + *Clinical Procedures*	+
6	Clinical Skills	+ + *Clinical Procedures*	+ + *Clinical Procedures*	+
7	Community Issues Management	+ + *Problem Solving*	+ *Care Provider*	+ *Manager Leader Collaborator*

The professionalism assessment was obtained from the PBL and OSCE assessments. Course Coordinators can develop different assessment methods other than PBL according to the content and character of learning outcomes in MKK. Two alternative general formulas are used to

calculate test scores to be final ones. The selection of the formula for calculating the final grade is adjusted to the learning method applied in the lecture. Determination of the final value of the system MKK, according to the formula in box 6.5, as follows:

Alternative 1

Final Score of Clinical Medicine/ System Competency Course

$$= \frac{3\{\text{Average of } \textit{Case-based assessment}^{\#} \text{ and } \textit{Project Based Assessment}^{*}\} + 3\{(\text{module-topic exam average} + \text{UTS}) + 2\text{x UAS}\}}{6}$$

*Project Based Assessment: presentations, practicum activity reports,

#Case based assessment: PBL, score of skills/clinical skills

Alternative 2

Final score of MKK Clinical Medicine/ System without skill component

$$= \frac{\{(\text{module-topic exam average}) + \text{PBL score} + 2\text{x (UTS)} + 2\text{x (UAS)}\}}{6}$$

Final score of MKK Clinical Medicine/ System without skill component

Final score of MKK Clinical Medicine/ System with skill component

$$= \frac{\{(\text{ module-topic exam average}) + \text{PBL score} + 2\text{x (UTS)} + 2\text{x (UAS)} + \text{skill score}\}}{7}$$

Final score of MKK Clinical Medicine/ System with skill component

Box 6.5 System/Clinical Medicine Final Score Formula

6.1.4.4 Assessment Methodology Course & Final Assignment

a. Assessment Methodology

The assessment is carried out 4 times, each in Semester I, IV, V, and for the Final Project in Semester VI.

1) Evaluation Methodology-1: evaluation of learning outcomes is a combination of test scores and structured assignments/seminars. Final Score = 60% written exam (MCQ) + 40% structured assignments (including seminars)
2) Evaluation Methodology-2: evaluation of learning outcomes is a combination of test scores and critical assignments. Final Score = 80% written exam (MCQ) + 20% critical task.
3) Evaluation Methodology-3: evaluation of learning outcomes is a combination of test scores and proposals. Final score = 40% written test (MCQ) + 60% proposal test score.

4) Final Project Assessment, The Final Project Assessment, consists of 2 (two) components, namely the Assessment of the Final Project Writing Process and the Assessment During the Exam, with a weight of 50% each.
   - Assessment of the Writing Process by the Supervisor includes Attitude (30%), scientific knowledge (30%), Scientific Creativity and Log Book (30%), and Scientific Knowledge (10%)
   - Assessment during the Examination by the Examiner Council includes Manuscripts (40%), Presentations (40%), and Scientific Knowledge (20%).
   - The final score for the Final Project will be decided through the deliberations of the Examiner Council. The final test score is stated with a score converted into the letters A, B+, B, C+, C, D+, D, or E. With the approval of the Examiner Council, the score (letter) can be announced to students at the end of the exam.
   - Students are declared 'Passed' if they get at least a grade of C. If the revision is considered quite a lot, the Chief Examiner may only announce with the word 'Pass.'
   - Students who are declared to have not passed the exam must carry out the decision of the Examiner Council.
   - After being declared graduated, students must upload the final project document along with the magazine format to the repository.ub.ac.id address through the SIAM page of each student as a graduation requirement.

6.1.4.5 PKNM Course Assessment

PKNM is one of the University's Compulsory programs, so the assessment follows the rules determined by Universitas Brawijaya. However, in its implementation with the weight of the credits owned, to facilitate academic administration and calculation of GPA in academic transcripts, PKNM is also one of the Competency Courses in BSPM. Assessment of the achievement of learning objectives and outcomes includes competency components consisting of elements of knowledge, skills and behavior categorized into inputs, processes, and outputs.

a) The "Input" assessment is carried out through the Writing Debriefing Exam
b) The "Process" assessment includes an assessment of the performance and progress of student activities through the student PKNM activity log book with the criteria set out further in the PKNM SOP
c) "Output" assessment includes Proposal Value, Report Value, and Presentation Value. The rubric for the assessment of each component will also be further regulated in the PKNM SOP
d) The Final Score (NA) of the PKNM MKK can be calculated according to the PKNM guidebook, with the calculation referring to the value of the Activity Credit Unit (SKK) owned by the student.

6.1.4.5 Elective Course Assessment

The method of assessing the learning outcomes of the elective MKK is adjusted to the character of the competencies to be achieved by referring to the Miller Pyramid. Assessment (assessment) of learning outcomes in the elective module uses a portfolio. The portfolio in question is a collection of records of student activities and achievements during the learning process, accompanied by reflections on how they achieved the desired competencies. Further details on the Elective MKK assessment are in the Elective MKK Implementation Guide.

6.1.4.6 Effective Communication Course Assessment

The Assessment of Effective Communication Competency Course follows the principles of Clinical Skills assessment in general. Effective Communication MKK assessment follows the generic formula for the System MKK assessment (Box 6.2). Effective Communication Assessment includes:

a. Cognitive Assessment

1) Communication Theory Writing Exam, History Taking, Basic Physical Examination (Semester I - II)
2) Advanced Communication Theory Writing Exam, History Taking, and Advanced Physical Examination, according to the topic of related Clinical Themes and Blocks (Semester III to Semester VII).

b. Communication Skill Assessment

Communication Skills Assessment is carried out using the Direct Observation Check-List, Video Assessment, and OSCE methods. The Learning Guide and the Course Book of Effective Communication provide a detailed explanation of the method.

6.1.4.8 Doctoring Competency Course Assessment

Competency assessment in MKK Doctoring is different for MKK Doctoring I and MKK Doctoring II to VI. MKK Doctoring I uses a generic formula for BMS assessment (Box 6.2), while MKK Doctoring II to VI is presented in this section.

Komponen penilaian ketercapaian kompetensi diformulasikan dengan komposisi sebagai berikut:

1) Cognitive & Critical Thinking Elements: 30% in the form of the results of various assignments and written exams
2) Psychomotor/Skill Elements: 40% in the form of Mini CeX/PBL scores and/or OSCE values
3) Elements of Professional Behavior & Effective Communication: 30% in the form of Mini CeX, OSCE, and/or portfolio values
4) There are two alternative general formulas used to calculate the test score to be the final score. The selection of the formula for calculating the final grade is adjusted to the learning method applied in the lecture, presented in box 6.6 as follows

Alternative 1

MKK Doctoring Final Score

$$= \frac{3\{\text{Average of } \textit{Case-based assessment}^{\#} \text{ and } \textit{Project Based Assessment}^{*}\} + 3\{(\text{module-topic exam average} + \text{UTS}) + 2\text{x UAS}\}}{6}$$

*Project Based Assessment: presentations, practicum activity reports,

#Case based assessment: PBL, score of skills/clinical skills

Alternative 2

Final score of MKK Doctoring without skill component

$$= \frac{\{(\text{module-topic exam average}) + \text{PBL score} + 2\text{x (UTS)} + 2\text{x (UAS)}\}}{6}$$

Final score of MKK Doctoring without skill component

Final score of MKK Doctoring with skill component

$$= \frac{\{(\text{ module-topic exam average}) + \text{PBL score} + 2\text{x (UTS)} + 2\text{x (UAS)} + \text{skill score}\}}{7}$$

Final score of MKK Doctoring with skill component

Box 6.6 Doctoring Competency Course Final Score Formula

Description of box 6.8 with the following explanation:

- Written exams can be done with assignments, MCQ exams, online/offline quizzes, either multiple choice or essay (Modified Essay Question)
- Portfolio scores are obtained by assessing the portfolio rubric based on the contentiousness index as follows:

No	Assessment Component	Maximum Score	Assessment Criteria		
1	Study plan filling	6	Unfilled -2-0	Random Planning 1-4	Descriptive planning 5-6
2	Proof of independent task completion	8	No submission -6 - 0	Submit (late, not according to task criteria) 1-5	Submit according to schedule correctly 6-8

4	Commitment and Coherence of study plans with selfreflection	8	Reflection is incoherent/perfunctory or not completely filled -8 - 0	Self-reflection has not described the development process coherently with learning and selfimprovement plans 1-5	Existing reflections and evidence show coherence with learning and selfdevelopment plans 6-8
5	Tutor feedback notes & Clearance on the role of conduct	8	Unprofessional Records 3 domains -6 - 0	Behavior improvement feedback 1 - 5	Positive feedback + No unprofessional notes 6-8

- Each student has received a capital score of 60, which can be increased to 90 (maximum final portfolio score), with scores collected according to the criteria above.
- Mini CeX scores are obtained from grades when students practice skills.
- To be calculated into the final score, the OSCE Doctoring score in letter form is converted into a numerical value as follows:
    - Pass all (first take), with the value of all stations > 80%: 90 (A)
    - Passed all scores <80%: 85 (B+) o Did not pass 1 station: 80 (B), and passed directly repeat
    - Did not pass > 1 station: 70 (C+), repeat directly (maximum B+)
    - Did not pass the test: 65 (D+)
    - Did not pass >3 stations: repeat OSCE on the make-up exam: score 60 (D)
- The final grade score is then converted into letter grades following the applicable academic regulations in the Medical Study Program
- Doctoring competence is expected to be achieved if students have met a final score of at least 68% of all competencies or equivalent to the letter C +

6.1.5 Assessment Procedure

The exam is a strategic assessment step of measurement, through written, oral and observational exams, to measure student achievement of the specified standard learning goals and achievements, measure the effectiveness of the teaching and learning process, and increase learning motivation.

6.1.5.1 Regular Examination

a) The Regular Examination is an assessment that is scheduled to be held by the Study Program, which consists of the Final Block Examination (UAB), Mid-Semester Examination (UTS), and Final Semester Examination (UAS) and is followed by all students registered in the semester.
b) To be able to take regular examinations, students must be present in MKK face-to-face activities, including attendance in PBL group discussions, at least 80% of the total face-to-face sessions. Students whose attendance rate is less than 80% are not allowed to take the Final Semester Examination (UAS).
c) Head of Study Program publishes the Schedule of Block Final Exams (UAB), Mid-Semester Examinations (UTS), and Final Semester Exams (UAS) submitted to all related parties through Study Program Announcements.
d) Exam implementers are block coordinators (PJMK), block contributor lecturers, and Study Program education staff.
e) The chart of the regular examination can be seen in Figure 6.2

6.1.5.1.1 Block Final Exam (UAB), Mid-Semester Exam (UTS), and Final Semester Exam (UAS)

a) Block Final Exam (UAB) is an exam held by the study program at the end of the implementation of the related block.
b) Mid-Semester Examination (UTS) is an examination held in the middle of the semester for MKK, which has not been held UAB. Held at the place and time according to the block learning schedule and compiled by the Study Program.
c) The Semester Final Examination (UAS) is carried out by the Block Team or the related MKK PJMK, carried out at the place and time according to the Block learning schedule, and compiled by the Study Program.
d) UAB, UTS, and UAS exam materials come from material contributors in the related MKK/Block, with the amount and composition of the question material determined by the PJMK of each MKK in the MKK assessment blueprint in the MKK/RPS Book.
e) UAB, UTS, and UAS questions are arranged as multiple-choice (Multiple Choice Questions = MCQ) with scoring, grading, and weighting determined by the relevant PJMK.
f) The questions are arranged in Indonesian and English.
g) The exam is recommended to be carried out as a computer-based test (CBT).

6.1.5.1.2 Exams/Topic Tests and Module Tests

a. MKK Module Exams are Module Exams/Tests, Topic Tests, Pre-Post Tests, Practical Tests, and other tests planned by the related MKK PJMK and organized by the relevant Department.

b. It is hoped that every MKK will hold an exam/test on this topic module so that it can be used to assist the success of student studies and monitor the related MKK learning process in the Department.

6.1.5.2 Supporting Exam

Supporting Exams are exams that improve regular exam results, increase the achievement index, and measure the development of student retention abilities toward competency mastery. The final score listed in the transcript is the best score (compared between before and after taking the remedial exam).

6.1.5.2.1 Remedial Examination (UP)

The implementation of the Remedial Examination refers to the following provisions:

a) The remedial Exam (UP) is an exam held to allow students to improve their UTS or UAS scores.
b) The UP process is carried out once at the end of each semester
c) The UP process is in the form of an exam using the appropriate method without being preceded by face-to-face lectures/discussions
d) UP participants are students in the current semester and participate in MKK learning related to a minimum of 80% attendance at regular lectures.
e) Students proven to have cheated during UTS and/or UAS are not allowed to take the Remedial Exam.
f) The study program facilitates scheduling and infrastructure for the implementation of exams.
g) The maximum UP score is 70
h) The final MKK score after participating in the UP is a maximum of B+.
i) **Calculation of the final MKK value after UP refers to the formula in boxes 6.7 and 6.8 as follows:**

1) If the UP score is better than UTS/UAS:

$$\text{Final score} = \frac{\{1x\ (\text{topic exam average}) + \text{PBL} + 2x\ (\text{best score of UTS/UAS}) + 2x\ (\text{UP})\}}{6}$$

Box 6.7. MKK Final Score Formula after UP without skill

$$\text{Final Score} = \frac{\{1x\ (\text{topic exam average}) + \text{PBL} + 2x\ (\text{best score of UTS/UAS}) + 2x\ (\text{UP}) + 1x\ \text{skill}\}}{7}$$

Box 6.8. MKK Final Score Formula after UP with Skill Components

If the UP value is less than the UTS and UAS scores, the final MKK value refers to the UTS and UAS scores.

6.1.5.2.2 Short Semester (SA)

The implementation of the Short Semester refers to the following provisions:

a) The Short Semester Regulation refers to the Dean's Decree Number 45A of 2020
b) Short semesters are lecture activities carried out between even and odd semesters to increase the student's Grade Point Average.
c) The learning method in the Short Semester is held by the relevant MKK, which begins with a face-to-face short lecture process and discussion, and ends with the Intermediate Semester exam.
d) Short Semester and its examinations are held for students approaching the screening stage (evaluation of study success), which consists of three stages, namely: (1) Stage-1 screening at the end of Semester II, (2) Stage-2 screening, at the end of Semester IV, and (3) screening for Stage 3, at the end of Semester VII (before entering the Clerkship stage)
e) The Short Semester material in the evaluation of stage 1 is the learning material for Semesters I and II; The Intermediate Semester material in the evaluation phase 2 is the learning material for Semesters I, II, III, and IV; and the Short Semester Materials in the 3rd stage evaluation are the learning materials for Semesters I, II, III, IV, V, VI, and VII.
f) Students can take the Short Semester for a **maximum of 9 credits** in one implementation period
g) The Short Semester is held for at least 8 weeks and/or held in the form of face-to-face at least 16 meetings, including the mid-semester examination and the final examination of the Short Semester.
h) To be able to take the Short Semester exam, it is required that the presence of students in face-to-face activities, including Inter Semester group discussions, is at least 80%. Students whose attendance rate is less than 80% are not allowed to take the Intermediate Semester exam
i) The Bachelor of Medicine Study Program schedules the Short Semester to be held 1 (one) time for each MKK at each evaluation stage
j) To take part in the Short Semester, students are required to register for the Academic sub-section through the education staff in the study program
k) The cost of implementing the Short Semester Program refers to the Dean's Decree No. 45A Year 2020.
l) The final MKK score after the Short Semester is taken from the previous highest score (UTS/UAS/UP) plus the Intermediate Semester score, then calculated using the formula according to to box 6.9 or box 6.10
m) The final grade of MKK after the Short Semester is a maximum of B.

n) Calculation of the final MKK value after the Short Semester refers to the following formula:

$$\text{Final Score} = \frac{\{1x\ (\text{topic exam average}) + \text{PBL} + 2x\ (\text{best score of UTS/UAS/UP}) + 2x\ (\text{SA})\}}{6}$$

Box 6.9. MKK Final Score Formula after SA without skill

$$\text{Final Score} = \frac{\{1x\ (\text{topic exam average}) + \text{PBL} + 2x\ (\text{best score of UTS/UAS/UP}) + 2x\ (\text{SA}) + 1x\ \text{skill}\}}{7}$$

Box 6.10. MKK Final Score Formula after SA with skill

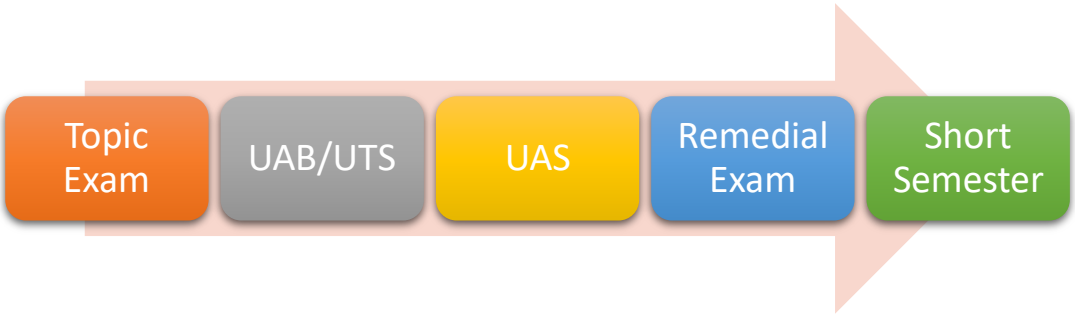


Figure 6.2. The chart of the administration of the Regular Examination and Supporting Examination

6.1.5.2.3 Learning Progress Test

a) The study progress exam is formative and carried out as part of the Study Success Evaluation. Implementation is carried out by a team formed by the Department of Medicine at the suggestion of the Medical Study Program.
b) This exam is held at the end of every odd semester.
c) Every student **must take this exam** as a prerequisite for obtaining the KHS, which is part of the re-registration requirements as a student.
d) The material tested is all competency courses materials from semester 1

6.1.5.2.4 Makeup Examination

a) Makeup/Supplementary exams are exams conducted after regular exams and supporting exams not attended by students.
b) Students allowed to take the makeup exam if they can provode justifiable reasons (Chapter IX. Subchapter 9.2) during regular exams and supporting exams.

c) Students must report the reasons for the absence within a maximum of 1 (one) week to the the course coordinator as a condition for taking the makeup exam.
d) Course Coordinator regulates the implementation of makeup examinations (including post-practice examinations).

6.1.5.3 Conversion of Scores into Grades in Letter

After calculating the final score in the form of %, the final MKK value is converted to a quality value by referring to Table 6.3 as follows.

Table 6.3 Conversion Table of Score % into Grade in Letter and Number

Score (%)	Grade in Letter	Grade in Number
>80	A	4
75.1 - 80	B+	3.5
70 - 75	B	3
60.1 - <70	C+	2.5
56 - 60	C	2
50.1 - <56	D+	1.5
45.1 - 50	D	1
≤ 45	E	0
The student does not participate at all	K	-

6.2. Evaluation of Study Accomplishment and Duration of Study

6.2.1 Limitation

Evaluation is defined as a continuation of the assessment process, namely the decision-making process on student learning performance (a series of learning outcomes at a particular stage). Evaluation of the successful study is part of the institution's efforts to ensure the quality of graduates. Following the periodization (milestone) of learning outcomes outlined in the curriculum map, the evaluation is carried out in three stages. In this evaluation, a series of data from the assessment process is used as a benchmark to determine whether students can (pass) or not (do not pass) to continue their studies at the next stage or level, need remedial or drop out of the study. This study's success was evaluated in an assessment and evaluation quality assurance cycle that is part of the institution's internal quality assurance system, as shown in Figure 6.3.

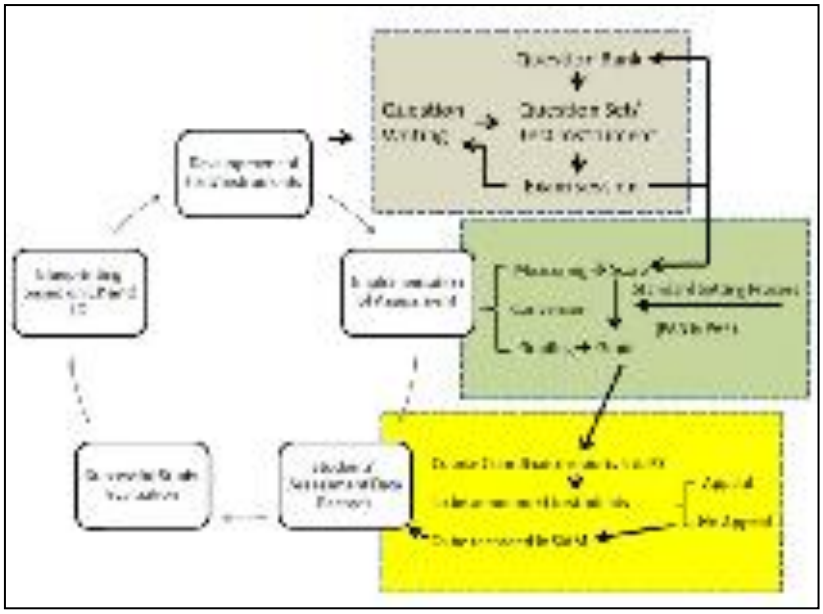


Figure 6.3 BSPM Assessment and Evaluation Cycle

6.2.1 Objectives of Evaluation of Successful Study

Evaluation of successful study aims to:

a. Determine the learning success of each Medical Discipline to achieve competence at the academic stage. Success is stated by giving Academic Transcripts as a form of recognition of scholarship in medicine.
b. Determine whether or not students can continue at the next stage of education in the FMUB Medical Study Program.

6.2.2 Stages of Evaluation of Successful Study

Evaluation of the success of the study was carried out in three stages, namely: Stage I evaluation at the end of semester II (the year I/end of the MKK Basic Medicine theme); Phase II evaluation is carried out at the end of semester IV (Year II/end of the MKK Life Structure & Life Protection theme); and stage III evaluation at the end of semester VII (end of the academic stage of education).

6.2.2.1 Stage I Evaluation (at the end of semester II)

At the end of semester II, students are considered to have achieved minimal mastery in mastering the MKK BMS, the Basics of Ethics, Professionalism, and the Basics of Effective Communication which are the basis for further competency development.

a) Minimum completeness is considered to have been achieved and students can continue their education to the third semester if they meet the following requirements.
   1. GPA > 2, and

2. **Pass all MKK in the Basic Medicine stage with a score of C, or** have an E score for one MKK; the value of E and value of D+/D is one MKK each, or the D+/D value is **at most 2 (two)** MKK at the **Basic Medicine** stage. Values that have not passed must still be corrected and pass within a maximum of 2 semesters in the next academic year (2 semesters).

b) Students **who cannot** continue their education to semester III are required to repeat the learning process in Semester I and II in the following academic year, with the following conditions;
   1. Required to take all MKK in that semester for MKK with a score below C
   2. It is recommended to take MKK whose score is below A (B+/B/C+)
   3. The final score is the best value ever obtained

c) If after the extension of time in clause b, the student has not reached the MKK pass score (score <C, the students is declared to have dropped out of the FMUB.

d) The drop-out mechanism is regulated in a separate SOP.

6.2.2.2 Stage II Evaluation (end of semester IV*)*

This evaluation is intended to determine whether or not students can continue their education at the next stage and semester

1) Students are deemed to have met the minimum completeness of the MKK with the theme of Life Structure and Life Protection and can continue their education to the fifth semester if they meet the following requirements;
   1. **Passed all MKK** year I (Basic Medicine Stage in Table 6.1), with a score of C, and
   2. **GPA ≥ 2**, and
   3. **Pass all MKK** in semesters III & IV with a grade of C or have an E grade of one MKK, an E grade, and a D+/D grade of one MKK each, or a D+/D score of at most 2 (two) Life Structure and Life Protection competency courses. Grades that have not passed must be achieved in the following semester.

b) Students who cannot continue their education to semester V, are required to repeat the learning process in Semester III and IV in the following academic year, with the following conditions;
   1. Required to take all MKK in that semester, for grades below C
   2. It is recommended to enroll the MKK whose score is below A.
   3. The final score is the best score ever obtained

c) If after the extension of time in clause b, the passing scores for all MKK have not yet been achieved, the student is declared to have **dropped out of study/dropped out** of the BSPM FMUB

d) The drop-out mechanism is regulated in a separate SOP.

6.2.2.3 Stage III Evaluation (end of Semester VII)

Stage III screening is carried out at the end of Semester VII with the final results being Graduates of the Academic Education Stage with a **Bachelor Degree in Medicine**.

a) Students are declared to have met the minimum completeness and **passed the Academic Stage of Education** if they meet the following requirements;
   1. GPA > 2
   2. TOEFL with a score of ≥ 460
   3. Passed MKK with a C score (no D/E score)
   4. Pass Probinmaba
   5. Meet the minimum requirements of the Student Activity Credit Unit (SKK)
   6. Pass the Final Assignment Exam

b) Students who still have MKK scores < C, must improve their scores through supporting exams

c) Students are declared **Dropped Out/End of Study** at the Academic stage of education at the Faculty of Medicine, FMUB if they have not passed until the maximum study period is 14 semesters.

d) The mechanism for dropping out of study/study period is regulated in a separate SOP.

6.3. Data and Report of Assessment and Evaluation Results

6.3.1 Data and Reporting of Assessment Results

a) Final MKK scores and details of their assessments are reported by PJMK to KPS a maximum of two weeks after the UAS implementation.

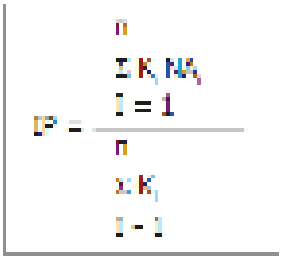
b) KPS announces students' final grades through the scoreboard and uploads them at SIAM in the form of letter grades.

c) Students can clarify or review the final score calculation results to the PJMK through KPS.

d) If there is no request for review within one week after the announcement, the KPS will make the value final and then become the basis for calculating the student's Achievement Index for the current semester.

6.3.1.1 Achievement Index

Achievement Index (IP) is a parameter used to quantify student learning achievement per individual based on the results of the MKK multimodal assessment in one semester. The IP is calculated using the formula according to box 6.10 as follows:



Box 6.11 IP Calculation Formula

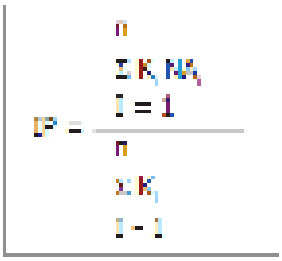
Box 6.11 description:

- IP is the achievement index, which can be in the form of semester IP
- K is the number of credits for each Integration Block
- NA is the Final Score of each Integration Block
- n is the number of Blocks taken in 1 related semester

6.3.1.2 Grade Point Average (IPK)

The Grade Point Average is a parameter used to measure a student's individual ability based on the results of studies throughout the previous semester which is a reference to describe the minimum mastery of learning achievements at the learning stages (Basic Medicine Stage, Clinical Medicine Stage, and Clinical Rotation). Some of the provisions related to the GPA in BSPM are as follows;

a) Each semester's study load is the same for each student.
b) Students cannot take specific courses but take the entire block in 1 semester. The result of semester IPs does not affect the number and load of blocks taken.
c) The final score to determine the GPA of the Medical Education FMUB Academic stage is taken from the highest/best score obtained between the assessment scores of each evaluation stage.
d) As previously mentioned, the GPA is a parameter to evaluate students' Study Success.
e) The result of the Grade Point Average becomes one of the parameters for determining whether or not students can continue their studies in the Doctor Profession Study Program.
f) The calculation of GPA follows the formula according to box 6.11 as follows.



Box 6.12 GPA Calculation Formula

Keterangan kotak 6.12:
• GPA is the Grade Point Average
• K is the number of cumulative credits
• NA is the final score of the quality of each MKK that has been taken (Table 6.3)
• n is the number of MKK taken in the last semester

6.3.2 Data and Reporting on Evaluation Results

Evaluation decisions in stages I, II and the final evaluation are recorded in the Minutes of Evaluation and determined in a decree by the executive board of the Faculty of Medicine.

6.3.3 Academic Transcript

a. Academic Transcript contains a list of Competency Subjects (MKK) taught throughout medical education from semesters I to VII.
b. The values represent the mastery of the doctor's competency standards that must be used to register doctors at the Indonesian Medical Council.

6.3.4 Diploma Supplement Certificate (SKPI)

SKPI is a certificate that provides information about qualifications and results achieved. The learning achievements of medical undergraduates include attitudes, knowledge, general skills, special skills, achievement activities, and awards that refer to Presidential Regulation no. 8 of 2012 concerning the Indonesian National Qualifications Framework (KKNI).

6.4. Student Academic Information System (SIAM)

Student Academic Information System (SIAM) is an information system for managing student academic data, including data on assessment results in the form of MKK scores, semester IPs, GPA, and a history of how students get MKK scores (through remediation, supporting exams, etc.). SIAM is managed centrally by Universitas Brawijaya and is an integral part of UB's information system. Matters related to SIAM management in BSPM are as follows.

a) Input and data changes are carried out by the study program admin, academic staff at BSPM on the orders of KPS.
b) Before uploading to SIAM, the study program admin checks that the PJMK has completed the manual process for reporting the final MKK score.
c) Every time the administrator inputs or changes SIAM data for regular MKK, the study program admin will be accompanied by lecturer staff from the Assessment Team to minimize errors and guarantee the quality of the value input process.

6.5. Judicium

The final grade of graduation is determined in the judicial process. The Judicium is held at the end of the clinical competency stage of education (Bachelor of Medicine).

- The Judiciary Meeting is chaired by the Head of the Department and Head of Study Program and attended by the Person in Charge of Competency Course Blocks (PJMK) and the Head of Department or Person in Charge of Education (PJP) of the Department with the mandate of the Head of the Department.
- In graduation, a student is declared eligible to hold a Bachelor of Medicine degree if he passes the competency transcript with a score of at least C, and has a certificate of competence.
- A student can be declared a Bachelor of Medicine if he has fulfilled all the educational requirements in this Academic Handbook and does not exceed the maximum study period of 14 (fourteen) semesters.

- The graduation predicate consists of 3 levels, namely 'Satisfactory', 'Very Satisfactory', and 'With Honor.'

a. Grade Point Average (GPA) as the basis for determining graduation predicate:
   - GPA 2.00 – 2.75: satisfactory (“satisfy”)
   - GPA 2.76 – 3.50: very satisfactory (“excellent”)
   - GA 3.51 – 4.00: with honors (“cum laude”)

b. The graduation predicate 'with honors' ('Cum Laude) also takes into account the accuracy of the length of study, which is 7 (seven) semesters with a minimum MKK score of B, has never been subject to disciplinary sanctions and academic sanctions.

The flow of the medical education process at the Academic Education stage at BSPM FKUB can briefly be seen in Figure 6.3 below.

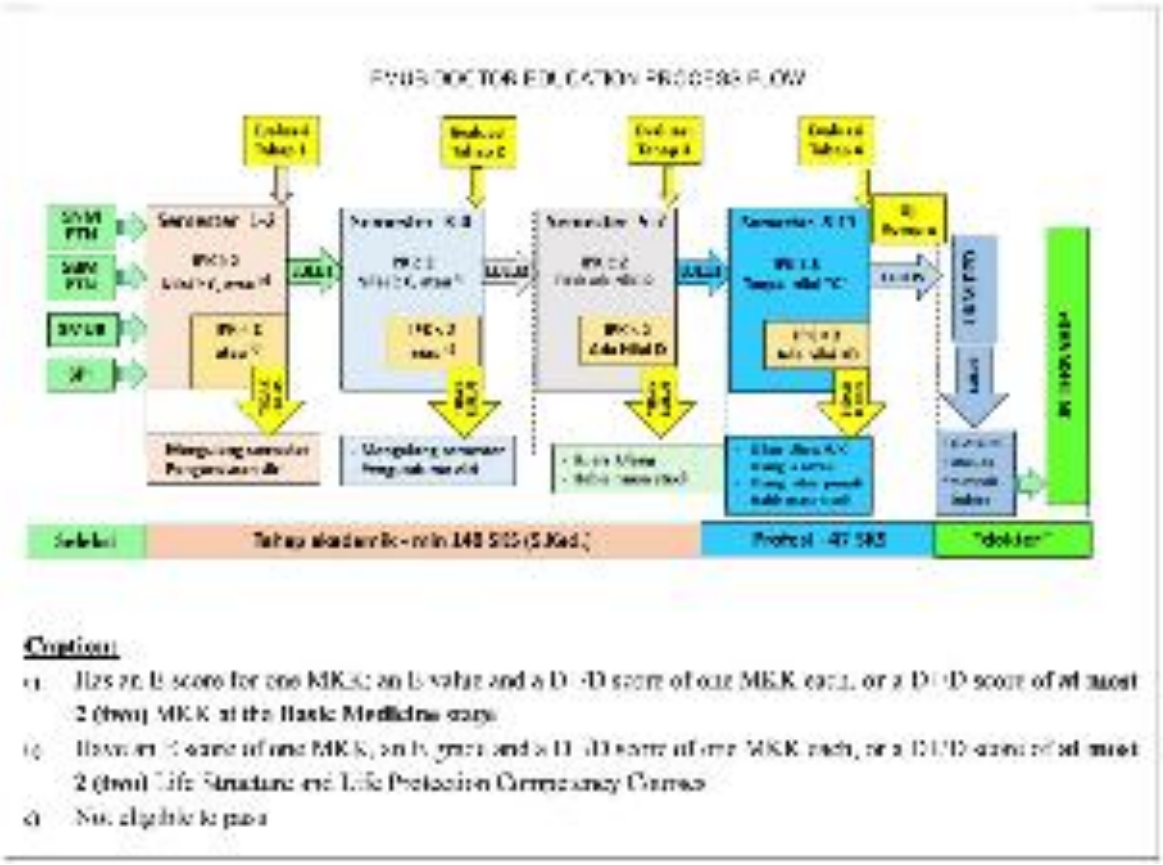


Figure 6.3 FMUB Doctor Education Process Flow

6.6. Student Status Change

Drop out of Study / Drop out / End of Study Period / Failed to pass.

a. Drop out students are students who fail to meet the requirements for the evaluation of study success (screening) or students who are not registered because they have not registered for more than 2 (two) consecutive cumulative semesters.
b. End of Study Students are students who for a maximum of 14 semesters do not meet the requirements for Passing Study or Failing to Pass

The decision to drop out of study and end of the study period is issued by the Rector based on the Dean's report on the recommendation of the Head of the Study Program through the Head of the Department of Medicine.

CHAPTER VII
ONLINE LEARNING GUIDELINES

7.1 Background of Online Learning

At the beginning of 2020, there were obstacles in implementing conventional or face-to-face teaching and learning activities caused by the global pandemic. To carry out academic activities, teaching, and learning activities are carried out using technological support devices. Learning activities are carried out online (online) while still referring to the applicable procedures and curriculum. The utilization of technology used for teaching and learning activities is strived to the maximum and adapted to the infrastructure owned by FMUB. The use of technological tools in academic activities is expected to continue to be developed. It can be perfected for implementing the teaching and learning process in the future. Because there are technical differences in conventional teaching and learning activities compared to online, the new academic handbook includes guidelines that explain related steps and regulations that can legally be used to implement online teaching and learning activities.

7.2 Mechanism of Online Learning

Online learning can be divided into two models of interaction between lecturers and students based on the time of the learning process: synchronous learning and asynchronous learning. In synchronous learning, lecturers and students carry out the online learning process at the same time. Lecturers and students interact directly through media or technological devices, thus enabling teaching-learning activities and direct discussions. In asynchronous learning, lecturers and students carry out the online learning process at different times. The hallmark of this asynchronous learning model is that the lecturer first provides teaching materials and questions used in learning activities. Then at a predetermined time, students can study the teaching materials or work on the prepared questions.

Both synchronous and asynchronous learning has advantages and disadvantages. However, the existence of these two types of models should be adjusted to the abilities, needs, and availability of facilities and infrastructure between the various components involved in teaching and learning activities. Synchronous online learning processes provide lecturer and student interactions almost similar to conventional patterns but also require more resources and more scheduled time. While the asynchronous online learning process is more flexible and less demanding on a busy schedule, interactions and discussions between lecturers and students cannot occur directly. The two online learning models can be used in learning activities such as lectures, practicum, PBL, skill learning, and exams.

7.2.1 Mechanism of Synchronous Learning

As for the steps in the process of synchronous online teaching and learning activities, it can be noted in the points below:

1. Lecturers upload lecture materials to the Learning Management System (LMS) employing UB's Virtual Learning Management (VLM), Indonesian Online Learning System (SPADA), Faculty LMS, Google Classroom, and social media.
2. Lecturers give Live Online Lectures through broadcast facilities through applications such as ZOOM, Meet Google, Live Instagram, and Live Youtube.
3. Students join the lectures via Live streaming.
4. Students can discuss and ask questions to the lecturer via text broadcast or chat from the application.
5. Lecturers can give lectures, quizzes, or exams through LMS.

7.2.2 Mechanism of Asynchronous Learning

As for the steps in the process of asynchronous online teaching and learning activities, it can be noted in the following points:

1. Dosen upload materi kuliah ke *Learning Management System* (LMS) dengan sarana LMS Fakultas, SPADA, Google Classroom, Media sosial.
2. Dosen merekan video materi Kuliah Daring dengan menggunakan aplikasi perekaman video seperti kamera (*Handphone*), Filmora (*Personal Computer*), OBS Studio (*Personal Computer*).
3. Dosen upload Video rekaman kuliah ke LMS atau Youtube
4. Mahasiswa mengikuti Kuliah dari LMS atau Youtube
5. Mahasiswa bisa tanya-jawab ke dosen melalui email atau media sosial tertentu.
6. Dosen bisa memberikan tugas kuliah, kuis, ujian melalui LMS/media sosial

7.2.3 Mechanism of attendance of lecturers and students

Proof of presence is evidence of the participation or presence of lecturers and students in implementing online learning. The existence of evidence of this participation is essential, considering that the online mechanism still has several loopholes that can obscure the absence of lecturers or students from being tracked or not known with certainty. Evidence of attendance or presence should be adjusted to the media used and can show the ongoing process of teaching and learning activities that are being carried out. Examples of attendance evidence that can be used are screenshots of the media being used or the use of specific programs or applications that can accommodate proof of attendance, such as google forms, etc. Lecturers will use the attendance evidence as data for reporting the implementation of online lectures through uploads to academic data or through the gapura.ub.ac.id web.

7.2.4 Time and Duration of Learning

The time for the implementation of online learning follows the official schedule of the FMUB academic calendar, which has been adjusted. This is because implementing online learning has a different level of flexibility from conventional methods. In addition, some adjustments must be made to the content of online learning, which causes a shift and modification of teaching materials but still refers to the applicable curriculum. The arrangement of the planned lecture

schedule in sync with the video conference (video conference or live streaming) is expected to follow the official FMUB academic schedule so that the schedule does not clash with other lectures.

The duration of online learning is pursued following the duration of conventional learning but is strived to be more effective. This is possible when students already know the teaching material to be studied before online learning takes place. Interacting with lecturers through video conferences can be maximized for discussion and deepening the material taught. Efforts to make online learning effective considering that synchronous learning interactions with video conferences require the availability of a good internet network and absorb more internet quotas than using interaction with text (online discussions or text/chat crime).

Technically, the time for video conference or live streaming is recommended for a maximum of 90 minutes, while student-lecturer interactions can be more than that, which is adjusted to reasonableness. Learning activities are carried out 50% synchronously and 50% asynchronously, regulated by the MKK PJMK, respectively, by considering topic priorities, the willingness of supporting lecturers, and other considerations. Examples of learning activities that can be carried out synchronously with the VICON method are final project exams or research results seminars, research proposal seminars, comprehensive exams, and undergraduate exams

7.3 Ethics in Online Learning

Ethics and commitment from lecturers and students are needed for online learning. It ensures successful and effective online learning according to the applicable curriculum. The existence of standard ethics will minimize potential problems and the possibility of miscommunication arising from online learning. As for the detailed factors regarding ethics, it will be described in two parts, namely ethics in communication and ethics during learning activities.

7.3.1. Online Learning Communication Ethics

The points of communication ethics in online learning are as follows:

1. Honesty: the academic community strives for honesty in all scientific communications.
2. Integrity: the academic community continues to strive to keep promises in the agreement, act sincerely, and maintain consistency of mind with action.
3. Emphasize objectivity in communication: continually strive to avoid bias in all scientific communication.
4. Foresight: always careful to avoid mistakes, carelessness, and negligence, apply caution, and critically examine one's work and the work of others.
5. Openness in sharing information, ideas, tools, and resources. Able to be tolerant and open mind to criticism, suggestions, and new ideas.
6. Respect intellectual property: respect patents, copyrights, and other forms of intellectual property and provide acknowledgment of scientific information that can be accounted for.

7. Maintain confidentiality: protect the confidentiality of communications, such as teaching and learning materials distributed for the educational process.
8. Responsible for publications: to advance education, the academic community needs to be responsible for their competencies and avoid less useful and duplicative publications.
9. Responsible for mentoring: assisting in educating, guiding, and advising students. Encourage students to enable them to make independent decisions.
10. Respect and appreciate fellow academics, treat them fairly, and always maintain and prioritize etiquette and courtesy.
11. Provide solutions or alternative solutions to problems that occur.
12. Socially responsible: always prioritize and promote social interests and prevent social hazards in education.
13. Non-discriminatory: Avoid discrimination against lecturers or other students based on gender, race, ethnicity, or other factors unrelated to scientific competence and integrity.
14. Professional and competent: maintain and enhance one's professional competence and expertise through education and lifelong learning, taking steps to promote competence in science.
15. Legality in communication: know legality and comply with relevant laws and institutional and government policies.

7.3.2 Ethical Implementation of Online Learning

The ethical points of implementing online learning are as follows:

1. Participative: always actively participate in the online learning process, both lecturers and students. Lecturers know the competencies that students must achieve and can explore and direct students in critical and solution thinking. Students actively participate in online learning and can carry out structured tasks given by lecturers properly and thoroughly.
2. Introduce yourself; always greet each other by prioritizing politeness.
3. Starting online learning by encouraging each other, preferably greeting with a smile or words that provide a positive atmosphere.
4. Using words and sentences and good language, adjusting the volume, tone of voice, voice intonation, and speaking speed is appropriate and easy to understand.
5. Wear appropriate, appropriate, and polite clothing.
6. Using polite and reasonable gestures, maintaining good posture, body position, and behavior, for example, not smoking, not leaving meetings without permission, online while on the phone, etc.
7. Look at the other person's face in online media such as Google Meet or Zoom. Expected not to look to the left and right more often when the other person is talking or leaving the place.
8. Respect each other's opinions when communicating.
9. When communicating synchronously or asynchronously, it is better to maintain sitting etiquette, standing etiquette, or other ethics that must be followed and are generally reasonable when communicating. If you are coughing or sneezing, immediately cover your mouth with your hands to respect the other person and the people around you.

10. Able to maintain a temperament in communication, try not to interrupt the speech of others, and maintain the emotional level of oneself and others.
11. Say thank you when you get help, and apologize when you make a mistake.
12. Respect those who are more senior.
13. Using a reasonable person's nickname.
14. It is allowed to express humorous interludes in communication to inspire enthusiasm and maintain a positive atmosphere.

7.4 Online Facilities

The online learning process can take advantage of several online application options that are currently available, including:

1. WAG (Whatsapp Group)
2. Instagram (www.instagram.com)
3. UB Virtual Learning Management (VLM UB) (vlm2.ub.ac.id)
4. Learning Management System (LMS) FKUB
5. The Indonesian Online Education System (SPADA) (https://spada.kemdikbud.go.id/)
6. Google Classroom (https://classroom.google.com/)
7. Google Meet (https://meet.google.com/)
8. ZOOM (https://zoom.us/)
9. As well as other similar applications

7.5 The Implementation of Online Seminars and Examinations

The implementation of seminars and student online exams is generally the same as what is usually done in the Faculty or work unit. The difference is replacing the face-to-face model of examiners and students using online technology media. Some things that need to be considered in conducting online student seminars and exams are as follows:

a. Administrative arrangements and or procedures that must be carried out are determined by each faculty or representative of the relevant work unit. It is recommended that all administrative processes be carried out online by sending documents via email, Google forms, or other media.
b. Documents for seminars and/or exams, such as PKL reports, Proposals,/Final Projects (Thesis, Thesis, Dissertation) must be received by the examiner team before the implementation of the seminar/exam.
c. Student seminars or exams, for example PKL Results seminars, Final Project Proposal seminars, Final Project Results in seminars, Comprehensive Exams, closed/open exams and the like can be carried out using video conference/vicon (Zoom, Google Meet, or other similar media).
d. During seminars or open online exams, students or other invitees can participate as has been done so far. In carrying out this, there is a moderator who is in charge of coordinating the order of the online seminar (eg asking all participants to turn off the microphone (silent mode) unless designated by the moderator).

CHAPTER VIII
ACADEMIC MANAGEMENT & ADMINISTRATION

8.1 Academic Management in FMUB

Following the laws and regulations, the academic implementers for medical education at FMUB are Study Programs, namely the Medical Study Program and the Doctor Profession Study Program. Each study program is coordinated by a Head of Study Program (KPS). Based on the Regulation of the Faculty of Medicine, Universitas Brawijaya No.1 of 2017 concerning the Organization and Work Procedure of FMUB, the organizational structure of the management is arranged as shown in Figure 8.1.

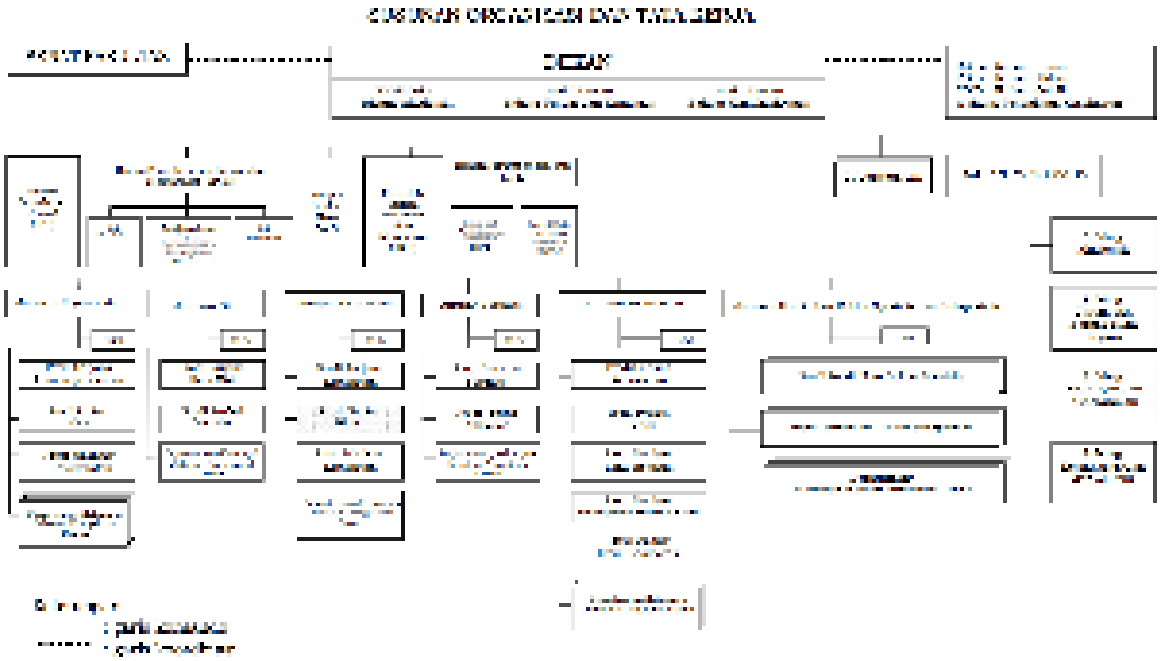
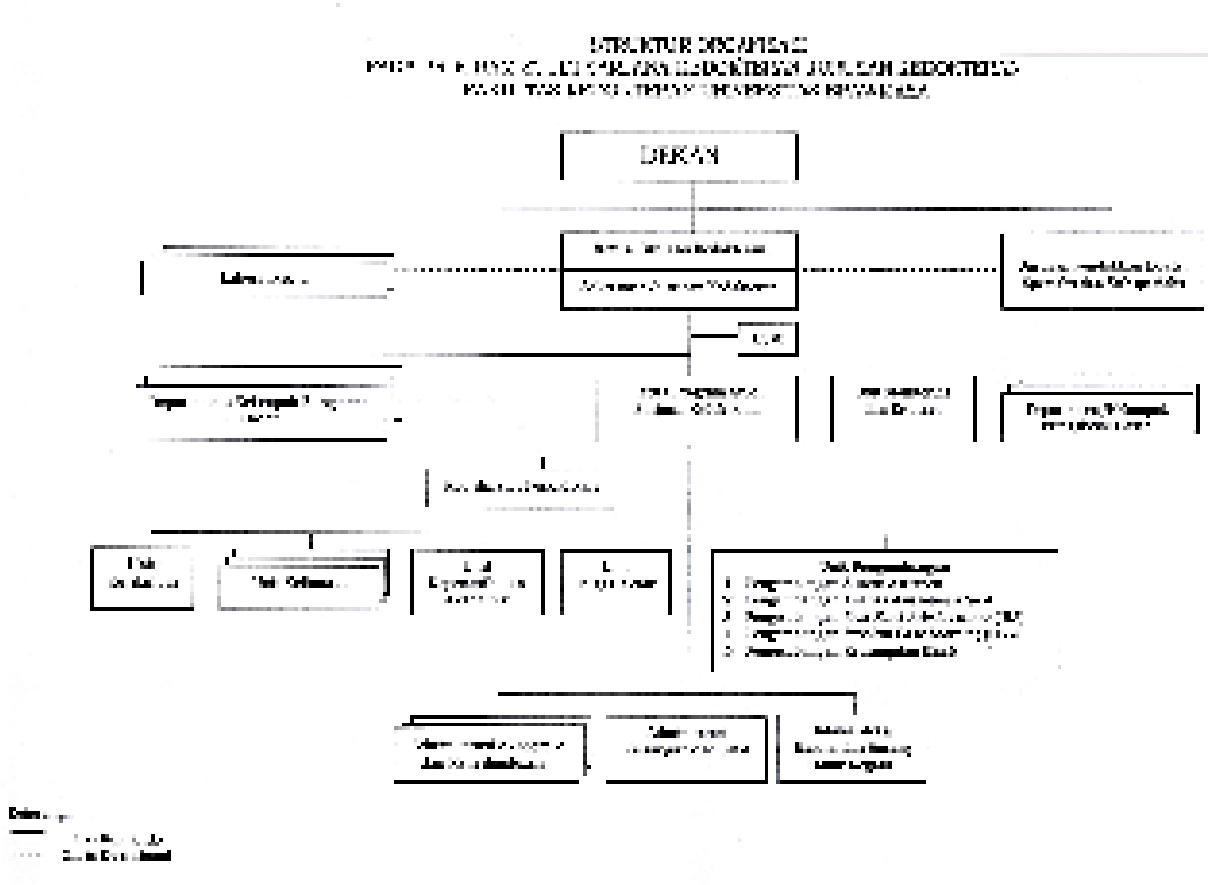


Figure 8.1 Governance Organization of FMUB

8.2 Academic Management in BSPM

The Teaching and Learning Process (PBM) for the academic education stage is carried out by the Head of the Study Program referring to the Academic Handbook stipulated by the Decree of the Dean of FMUB. To facilitate academic management in the study program, the Bachelor of Medicine KPS arranges a work organization as shown in Figure 7.2 (organizational structure of the Bachelor of Medicine Study Program) as follows:



To carry out educational activities, the Head of the Study Program (KPS) can coordinate with the Head of the Department (Kadep) through the Head of the Department of Medicine to manage lecturer learning activities in curriculum implementation. Suppose there is a change in the structure at the Department of Medicine level. In that case, adjustments will be made to academic management and administration as determined by the Decree of the Dean.

The Head of the Department (Kadep) supports educational activities and skills students of BSPM. KaDep provides competent and quality resources to support education, research, engineering, testing, pre-clinical and clinical.

Functionally, the Head of the Department may appoint a Person in Charge of Education (PJP) whose function is to bridge the coordination between the Department and KPS regarding the teaching and learning process, provision of lecturers and departmental learning materials following the block in which the Department is involved.

To carry out educational activities, KPS can coordinate with the Head of Department (KaDep) through the Head of the Department of Medicine to manage lecturer learning activities in curriculum implementation.

The head of BSPM supervises the monitoring and evaluation unit, curriculum unit, scientific coordinator, academic advisory unit, final project unit, and development unit. The development

unit consists of developing assessments, analysis and reviewing questions, Item Bank Administrators (IBA), Problem Base Learning (PBL), and clinical skills.

Scientific Coordinator or Course Coordinator (PJMK) is a Lecturer staff selected to assist KPS in;

1. Coordinate the design, implementation of learning, assessment, and development of competency courses (MKK) to the Department of Preclinical and Clinics that are integrated into competency courses learning through the Education Coordinator of each Department called PJP (Principal for Education).
2. Coordinate the design and implementation of learning, assessment, and clinical skills development with the Clinical Skills Coordinator.
3. Coordinate the management of student learning outcomes at the relevant competency courses and ensure their consistency until uploaded to the Academic Information System (SIAKAD).

The course coordinator is in charge of the Dean's Decree on the proposal of the Head of the Study Program through the Head of the Department of Medicine.

The Academic Advisory Coordinator is a lecturer staff selected to assist KPS in implementing and coordinating the design, implementation, and monitoring of evaluations in the academic advisory process. The academic advisory coordinator works with the Dean's Decree on the proposal of the Head of the Study Program through the Head of the Department of Medicine.

Academic Development Unit is a group of lecturers who are given specific tasks to coordinate certain academic functions. The Academic Implementing Assistant Unit consists of; Assessment Development Unit, Question Analysis Development Unit, Question Bank Development Unit / Question Bank Administrator, PBL Development Unit, and Clinical Skills Development Unit.

The Curriculum Unit is a lecturer staff selected to assist KPS in carrying out the following tasks:

a. Carry out planning, assessment, and curriculum development at the Study Program level
b. Conduct internal monitoring and evaluation of the curriculum, teaching and learning process, lecturer's instructional skills, and academic infrastructure at the Study Program level

The Final Assignment Unit is a lecturer staff selected to assist KPS in carrying out the following tasks:

a. Organize undergraduate-level final task registration activities
b. Serve the making of research permits for undergraduate students.
c. Organize undergraduate-level proposal exam seminar activities in coordination with the PJMK Methodology
d. Organize undergraduate-level final task exam seminar activities

e. Facilitate access of TA supervisors/examiners to students and vice versa.
f. Monitor and evaluate the management of the final task

The Assessment Development Unit is a lecturer staff selected to assist KPS in carrying out the following tasks:

a. Coordinate between the coordinator of the review unit and the coordinator of the Item Bank Administrator/IBA (Problem Bank Management Administrator) Unit.
b. Create a value control system from PJMK, validation by KPS, value publication and value verification.
c. Hold an assessment workshop
d. Conduct benchmark assessment system

The Question Analysis Development Unit is a lecturer staff selected to assist KPS in carrying out the following tasks:

a. Coordinate with the coordinator of the assessment system development unit and the coordinator of the question bank administration unit
b. Create and implement a review/question analysis system
c. Review the suitability of the exam questions with the blueprint
d. Analyze corrected test results.
e. Hold a review workshop on BSPM every semester
f. Provide feedback on question analysis to PJMK regarding the suitability of the questions with the blueprint and review of questions that have been tested.
g. Conduct a benchmark system review question

The Question Bank Development Unit/Question Bank Administrator is a lecturer staff selected to assist KPS in carrying out the following tasks:

a. Coordinate with the coordinator of the assessment system development unit and the review coordinator unit.
b. Create and implement a question collection system to the question bank
c. Regulate the administration of the question bank, including classifying and encrypting questions
d. Conduct question bank administration system benchmarks

Problem-Based Learning Development Unit (PBL) is a lecturer staff selected to assist KPS in carrying out the following tasks:

a. Implement Problem Based Learning (PBL) development activities
b. Develop and review the suitability of PBL scenarios
c. Tutor performance standard
d. Evaluate the tutor's performance

e. Conduct PBL system benchmarks

The Clinical Skills Development Unit is a lecturer staff selected to assist KPS in carrying out the following tasks:

a. Design and manage clinical skills implementation schedule.
b. Carry out clinical skills development activities.
c. Conduct Semester OSCE with PJMK
d. Carry out monitoring of the implementation of clinical skills
e. Conduct clinical skill benchmark

The Monitoring & Evaluation Unit is a lecturer staff selected to assist KPS in carrying out the following tasks:

a. Carry out assurance and development of academic quality at the study program level
b. Implement and coordinate academic staff in administering data to support academic activities
c. Prepare Study Program accreditation
d. Develop instruments, implement, monitor, and evaluate the teaching and learning process implementation to improve the quality of education
e. Conduct a tracer study/study tracking of students, alumni, and graduate users
f. Prepare study program performance reports regularly, to be reported to the Head of the Department.

The educational implementation process is also supported by the Administration Team consisting of the Academic Administration Coordinator, Academic Administration per semester, Financial Administration, General Affairs, and Infrastructure.

CHAPTER IX
ACADEMIC SUPPORT

9.1 Limitation

Following the Academic Handbook of Universitas Brawijaya, the minimum terms of the Global Standard of Medical Education as determined by the World Federation of Medical Education (WFME), that medical education institutions must have programs to help meet social, financial, and personal/psychological needs to support the success of studies. For BSPM, students are provided supporting facilities in Academic Health, Guidance-Counseling (BK), and other academic support facilities.

9.2 Academic Advisors

a. Academic Advisory is given to students at the Academic Education Level
b. The Study Program selects some lecturers as Academic Advisors (PA lecturers) for students. The composition of lecturers compared to students with an average ratio of 1 (one) lecturer to 10-15 students which the Dean's Decree then passed.
c. Each PA lecturer in the Academic Education Stage will escort the student who becomes his guide until the student graduates with the Bachelor of Medicine.
d. Student meetings/consultations with PA lecturers at least occur with a frequency of 4 meetings/consultations each semester, divided into 3 meetings before UAS and 1 meeting before SP as one of the requirements to take the exam.
e. Academic Advisor Lecturer (PA) is in charge:
    1) To evaluate and give approval to the Study Results Card (KHS) and give instructions to students about the course plan they will take and then outline in their Study Plan Card (KRS).
    2) To give instructions and advice on other things that can directly or indirectly affect the success of student studies.
    3) To provide advice and possible ways out of problems for students who become guidance.
    4) In some instances, for example, if PA lecturers cannot solve the problem, then PA lecturers can report to the Head of The Study Program (KPS), who will coordinate with the Department of Medicine and, if needed, will be consulted on the Counseling Guidance Team.
f. Academic Advisors must thoroughly master the Academic Regulations, Education System, and Learning Outcome Evaluation System to help students effectively follow learning each semester.
g. Academic advisory administration is organized through several lists and cards that an Academic Advisor must understand.
    1. List:
        - List of student names
        - List of exam scores

2. Card:
    - Study Plan Card (KRS), issued by the Study Program, contains all courses that are programmed and must be taken by students in each semester.
    - The Study Results Card (KHS), issued by Prodi, records the value obtained by students for the course in the semester running as programmed in KRS.
    - Academic Transcripts, issued by the Study Program, show the cumulative academic achievements of students in that semester.
3. The Study Program reserves the right to certify the Study Results Card and establish a Study Plan Card for the next semester.
4. Academic Advisor is under the coordination of the Head of The Study Program.
5. Monitoring and Evaluation of the Academic Advisory Program is carried out regularly every semester and reported to KPS

9.3 Counseling Guidance

a. Guidance Counseling is a process of providing systematic and intensive assistance to students in the context of personal, social, study, and career development for their future.
b. Counseling Guidance is provided by Counselors who have expertise in their fields in one Counseling Guidance unit.
c. Guidance and Counseling are under the coordination of the Department of Medicine.

9.4 Scholarship

Applicants from economically disadvantaged families can apply for Bidikmisi or ADik tuition assistance through the pages http://bidikmisi.belmawa.ristekdikti.go.id and http://adik.ristekdikti.go.id

9.5 Other Supporting Facilities

9.5.1 Library/Reading Room and Online Literature Access

Students' primary need is access to literature provided in the UB Library, Reading Room in the Laboratory, and free and paid virtual/online literature access such as EBSCO, ProQuest, OVIDs, Up to Date, and others. Access this literature virtually through a closed network in the UB environment with usernames and passwords given since the orientation of new students. The main teaching hospital (RSSA) also has a particular library consisting of various medical textbooks connected with the UB Library database, which can be utilized by the Medical and Physician Profession Study Program.

9.5.2 Information Technology and Internet Access

Internet access is provided to students through a closed network in the UB environment through microtic hot spots with fiber optics at all points of student activity in the FMUB environment. On GPP 1st floor, there are also given six pieces of personal computers (PCs) to be used for free by students. To support the success of KBK in the Bachelor of Medicine Program, FMUB has provided a Computer-based Space that allows the learning process (practicum dry lab) and computer-based examinations (CBT) with rapid analysis. The PSIK

(Information and Public Relations System Center) team provides help desk services to help students if they experience problems with internet access or problems with electronic devices supporting learning.

9.5.3 Common Study Room

To support the need for independent study and group study, a public area is provided for students in open spaces in the environment and the FKUB education building.

9.5.4 Canteen

To support the need for adequate nutrition and hydration with a reasonably heavy learning load in the implementation of the KBK, a canteen is managed by Dharma Wanita FKUB. The food and drinks provided in the canteen meet the standards of cleanliness and hygiene that the manager has determined.

9.5.5 Places of Worship & *Spiritual Coaching*

To support spiritual and religious needs in the framework of student mental development, some places provided worship facilities such as musholla and FK mosque for Muslim students and rooms for learning activities and religious discussions in general.

9.5.6 Student Organization and Talent Interest Development (Extra-Curricular)

1. Student activities coordinated by the Student Executive Board (BEM) and the Student Association of Doctor Education (HMPD) are under the responsibility and coaching of Vice Dean III for Student Affairs. In addition, co-curricular activities were held to support the success of studies.
2. Co-curricular activities in the form of activities intended to:
    a. Improve the ability to master the knowledge and learn how to learn, which is a new paradigm of learning.
    b. Increase the active participation of students in various scientific writing competitions and other reasoning activities.
    c. Increase community sensitivity and social responsibility as part of the development of 'community doctors.'
    d. Increase the active participation of students in research conducted by lecturers. These efforts are intended to enhance students' academic atmosphere to study well on campus.
    e. Improve the ability of cultural diversity to understand and live the social, cultural, and religious diversity between nations. This activity is intended to prepare students better in the framework of cross-border medical education.

CHAPTER X
ACADEMIC REGULATIONS & SANCTIONS

10.1. General Terms

General Terms As an element of the Academic Community, Students are positioned as adult people who are aware of developing their potential at Brawijaya University to become intellectuals, scientists, practitioners, and/or professionals.

10.1.1 Students' Rights

Students who have fulfilled administrative obligations (paying SPP, re-applying, and filling out a Study Plan Card /KRS for each semester) are entitled to:

a. Obtain education and teaching in accordance with the study plan (KRS) that has been signed by academic advisory lecturers (PA lecturers).
b. Participate in every student activity organized and approved by the Faculty and The University.
c. Obtain protection, assistance and security during your education at FMUB
d. Obtain and use the facilities available at FMUB according to the applicable ways and conditions.
e. Convey suggestions and opinions constructively in accordance with applicable regulations by remembering the norms of decency and decency following the personality and philosophy of the Indonesian nation.
f. Actively develop his profession by conducting learning, the search for scientific truth, and mastery of the development and practice of a branch of Science and/or Technology to become a scientist, intellectual, practitioner and/or cultured professional.

10.1.2 Students Obligations

10.1.2.1 General Obligantion

a. Actively together with other academic communities, develop their potential and science by conducting learning, the search for scientific truth, and mastery of the development and practice of a branch of Science and/or Technology and/or art to become a scientist, intellectual, practitioner and/or civilized and cultured professional.
b. Students are obliged to maintain ethics and adhere to the norms of Higher Education to ensure the implementation of Tri Dharma and the development of academic culture.
c. Fulfilling general obligations as a student following the provisions contained in the Academic Handbook of Universitas Brawijaya.

10.1.2.2 Specific Obligations

10.1.2.2.1 Clothes:

Every student must wear polite, neat, and appropriate clothes in the environment of Universitas Brawijaya and other educational rides during working hours.

a. Male students are prohibited from wearing clothes made of T-shirts, jeans (made from Denim), tight clothing, sandal shoes, and sandals.
b. Female students are prohibited from wearing t-shirts, t-shirts without a collar, subordinates made of jeans (Denim), tight clothing, short skirts above the knee, sandal shoes, and sandals. They are not allowed to use excessive makeup and accessories.

10.1.2.2.2 Hair:

a. Students are not allowed to dye their hair a striking color.
b. Students in headscarves must show their faces and are not allowed to use face coverings in a hospital environment or educational vehicle.
c. Female students who do not wear a veil must do their hair neatly.

10.2. Holiday, Permit and Leave Arrangements

a. The provisions of the holiday follow the national and academic calendars.
b. Permission is allowed during the teaching and learning process for a maximum of 20% of the total number of effective days of each block for reasons that can be accounted for, such as:
   1) Being ill as evidenced by the Certificate of Doctor
   2) Duty from the Faculty, stated by official duty letter.
   3) Another reason that can be accounted for.

   The process of obtaining a permit is a maximum of 1 week after students enter lectures.

c. Leave
   Students have the right to leave per the following provisions:
   1) Academic Leave
      e. Academic leave is a delay in administrative registration within a certain period with the rector's permission.
      f. Academic leave is submitted for one semester and, when required can be extended a maximum of 4 semesters.
      g. The period during academic leave is not taken into account as a period of study.
      h. Application for academic leaves no later than 1 month from the closing of academic registration.

i. Students submit academic leave through a written letter (form) submitted to the Dean through the Chairman of the Department on the knowledge of the Chairman of the Study Program.

2) The application for leave, in addition to academic leave, is still considered a period of study.

10.3. Violation of the Rules

10.3.1Classification of Code of Conduct Violations

Violations of the discipline of medical education students are grouped as follows:

1. Minor Offense
   a. Late attendance for scheduled teaching and learning activities (lecture/practice/tutorial) more than 15 minutes, 2 times.
   b. Violation of dress discipline 2 times.
   c. Make noise that interferes with lectures, practicum, and ongoing clinical learning activities.
   d. Smoke in the FMUB and Education Hospital.
   e. Eat when attending lectures / PBL / practicum / PANUM / exams.
   f. Not performing academic obligations or duties.
   g. Behave, dress, interact, and communicate that is not by ethical standards are carried out by students of the Faculty of Medicine.
   h. Violate the ethical standards of education at the Faculty of Medicine, Universitas Brawijaya.

2. Moderate Violation
   a. Be disrespectful towards colleagues and academics.
   b. Give or receive commissions/bribes for unauthorized purposes.
   c. Not carry out the obligations given as a sanction for minor violations.
   d. Fight (not in self-defense), extortion, intimidation, harassment, extreme community formation.
   e. Influence or try to influence others by persuading or giving gifts to influence the assessment of academic achievement.
   f. Not carry out administrative obligations as a student except for justifiable reasons.
   g. Harass lecturers in classroom setting.
   h. Take actions that can demean the dignity of others.
   i. Not carry out the obligations given as a sanction for minor violations.
   j. Repeat the misdemeanor more than twice.

3. Serious Offense
    a. Cheating at the exam (cheating, cooperation, or other forms of cheating) and stealing or documenting questions during the exam.
    b. All acts of forgery, including signatures, stamps, reports, and other information.
    c. Copy reports or scientific works of other parties (plagiarism).
    d. Replace positions or performing tasks/activities for the benefit of others in academic activities, at the request of others or of their own volition, such as; exams, activities, or other academic assignments.
    e. Make trouble, including fighting on campus.
    f. Do immoral acts such as committing sexual harassment, infidelity, pornography, porno-action, free sex, LGBT-based activities, and creating and distributing media containing immoral elements.
    g. Engage in drug abuse activities actively or passively.
    h. Proven to violate the laws and regulations in force in the Republic of Indonesia.
    i. Not implement the sanctions given due to moderate violations
    j. Provide facilities or infrastructure, including information technology, classified as cheating in academic activities, for example, making jokes/intermediaries to enter Higher Education.
    k. Do damage/disruption of information technology systems developed at Universitas Brawijaya.
    l. Commit violations that have the potential to damage the good name of the institution.
    m. Substitute, change, or falsify grades or academic transcripts, Student Identity Cards (KTM).
    n. Damage and steal other people's property/Faculty/Department/Study Program/Laboratory.
    o. Use illegally the room, building, or other facilities belonging to Universitas Brawijaya.
    p. Say and/or write obscene and vile words aimed at the institution, lecturers, employees, fellow students, and guests.
    q. Commit persecution, fraud, theft, forgery, extortion, murder, physical violence, gambling, liquor and abuse, storing and/or trading, and/or carrying and/or using narcotics and psychotropic substances.
    r. Bring and/or use firearms and sharp weapons into the campus and hospital environment except for institutional activities.
    s. Invite outside parties, including Extra Campus Student Organizations (OMEK), in activities that have the potential to damage facilities and or disrupt the campus atmosphere without the authorized permission (Vice Dean III).
    t. Carry out all activities and/or issue speech, writing, and behavior that leads to ethnic, religious, racial, and inter-group conflicts.
    u. Defame the alma mater by speech, writing, or behavior,
    v. Threaten/terrorize/intimidate lecturers concerning grades.

w. Carry out practical political activities and spread prohibited ideologies in the Campus Environment.
x. Invite or influence other students to take actions that are not commendable or contrary to legal and/or ethical norms that apply in the local community and the environment of Universitas Brawijaya.
y. Carry out medical actions and/or health services outside their authority.
z. Repeated moderate offense more than twice.

10.3.2 Sanctions

Sanctions for violations of the rules are given according to the level of the violation, which can be in the form of

1. Warning
   A warning is given to students who commit minor violations given by the PJMK, the Head of the Department, and the KPS..
2. Warning Letter
   A warning letter is given to students proven to have committed moderate violations. The Head of the Department gives a warning letter based on a written report from the PJMK, the Head of the Department, and the KPS.
3. Sanctions
   Sanctions are given to students who are proven to have committed serious violations. The authority to impose sanctions for serious violations related to academic activities (9.3.1.3.a – 9.3.1.3.d) is proposed by the PJMK to the Head of the Study Program. Sanctions include canceling the ongoing exam and not being allowed to take the Short Semester or Special Examination. While for other serious violations, sanctions are given through the Dean's Decree according to the results of the session held by the Ethics Advisory Board, Student Ethics Committee, and the Academic Community. The sanctions imposed can be as follows:

   1. Score Cancellation
   2. Cancellation of the study and required to repeat part or all of the study activities in the related block/MKK/station/laboratory.
   3. Complete cessation of education in BSPM.
   4. Sanctions for violating the law refer to legal procedures and decisions. During the investigation process, the implementation of the education program for students is suspended until there is a binding legal decision.

CHAPTER XI

CHANGES IN STUDENT STATUS AND TERMINATION OF EDUCATION

Change in student status is the change in academic and administrative status which can be grouped as follows:

1. Academic Leave
   a. Academic leave is a postponement of administrative registration within a certain period with the permission of the Rector and can be carried out starting in the first semester.
   b. A student can apply for a maximum of 4 (four) semesters of academic leave.
   c. Academic leave is not counted as a period of study, except for students who do not reregister without the permission of the Rector, it is still counted as a period of study
   d. Students can take academic leave for the following reasons:
      1. Health problems/sickness for a long time as evidenced by a doctor's certificate
      2. Maternity leave
      3. Domiciled/worked in a place that is not possible to carry out the learning process.
      4. Other reasons that are acceptable and by applicable regulations, including because it has been found by KPS based on the evaluation of the KPS Team and the Department that there are physical and/or mental disorders that have the potential to endanger themselves and others.

   e. Applications for academic leave are submitted to the Chancellor accompanied by strong reasons, known by the KPS, approved by the Dean and the parents/guardians/student institutions concerned. This submission must be made no later than 1 (one) month since the closing of academic registration.

   f. Applications for academic leave for the previous semester (backward leave) are not permitted.

2. Transferring to another university/resigning
   a. UB students who will move to other universities/resign must submit an application to the Chancellor with a copy to the Dean, along with the reasons for the move/resignation.
   b. Students who have moved to other universities/resigned cannot be reinstated as UB students.
   c. Students who transfer to other universities are entitled to an academic transcript and a cover letter from the Dean of FMUB

3. Admission of transfer students (UB Procedure Manual No. 090000206015 and UB education guidelines)
   a. A transfer student is a transfer student to an undergraduate medical study at FMUB from an undergraduate medical study at a State University with a minimum accreditation of B or an

overseas university that has received accreditation from the Directorate General of Higher Education, Ministry of Education and Culture.

b. Prospective students apply to move to Universitas Brawijaya following the requirements that have been set
c. The Academic and Student Affairs Bureau of Universitas Brawijaya (BAAK) checks the completeness of the application letter and conforms to the stipulated requirements
d. BAK requests a response to the Head of the Faculty/ Program Study
e. Faculty/Program Study conducts academic and non-academic evaluations of the students concerned
f. Based on the decision of the Head of the Faculty/ Study Progra,m, the process of accepting/rejecting a decision letter for a transfer application is signed by the Rector

4. Drop Out

   Drop-out students are students who do not meet the requirements for evaluating the success of their studies or students who are not registered because they have not registered for more than 2 (two) cumulative/consecutive semesters.

   a. The Dean reports the number of students dropping out of study each semester to the Rector.
   b. The Rector issues a Decision Letter on dropping out of study for the student concerned

5. Died

   If a student dies, the Dean reports to the Rector.

6. Dismissal as a UB Student

   Students can be suspended temporarily or permanently if they violate the provisions of the Rector's Decree Number: 044/SK/1985 concerning the Rules of the UB's Academic Community and other provisions that apply at Universitas Brawijaya.

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