

## Learning Outcomes

Study Programme / 14 Nopember 2023

### A. Attitude

Graduates are able to :

1. A1: Realize excellence based on religious morals (excellence with morality), able to work together, and show a responsible attitude to work in their field of expertise independently (Caregiver, Communicator, Manager, Teacher, Researcher)
2. A2: Internalize the spirit of independence, struggle, and entrepreneurship (Decision-maker, Leader, Life-long learner )

### B. General Skills

Graduates are able to :

1. GS1: Apply logical, systematic, and innovative thinking in the context of science and technology development, review its outcome, and apply the humanity values to create solution, idea, design and scientific description as a thesis or a final report (Life-long learner, Teacher, Researcher )
2. GS2: Make decisions correctly in the context of problem-solving based on analyzing information and data, document and assure data validity, and prevent plagiarism (Caregiver, Decision-maker, Leader, Researcher )
3. GS3: Perform independent, measurable, and quality performance, do a group work, supervise workers under their responsibility, and develop networks with mentors, associates, and colleagues in and out of the institution (Communicator, Manager, Leader)

### C. Knowledge

#### BACHELOR DEGREE

Graduates are able to :

1. K1: Explain fundamental and applied basic sciences, basic medical sciences and basic social sciences to support the pharmaceutical sciences (Caregiver, Life-long learner, Teacher)
2. K2: Explain basic principles of pharmaceutical science and technology relevant to the drug development, from the invention to the marketing aspect of new pharmaceutical

products. (Life-long learner, Teacher )

3. K3: Explain the concept of quality control for drug raw material and pharmaceutical preparations (drugs, traditional medicines, and cosmetics), food and beverages in accordance with scientific principles and standards (Teacher, Decision-maker, Communicator)

## **PROFESSIONAL DEGREE**

Graduates are able to :

1. K4: Uphold professionalism, moral, ethical, and legal aspects, in the practice of pharmacy (Caregiver, Decision-maker, Teacher).
2. K5: Perform pharmaceutical care and collaborate with patients, colleagues, and other health professionals by considering all legal, ethical, professional, sociocultural, and economic aspects to ensure the rational drug therapy and participate in preventive and promotive efforts (Caregiver, Communicator, Manager, Teacher)

## **D. Specific Skills**

### **BACHELOR DEGREE**

Graduates are able to:

1. SS1: Prepare pharmaceutical products (drugs, traditional medicines and cosmetics) covering aspects of the formulation, manufacture and quality assurance based on logical, critical, systematic, and innovative thinking (*Manager, Decision-maker*)
2. SS2: Assess the scientific validity of drug-related information by considering legal, ethical, professional, sociocultural, and economic aspects for the benefits of patients (*Decision-maker, Caregiver, Communicator, Manager*)
3. SS3: Conduct scientific review, research, publish the results, and be able to communicate and responsible for the results on the basis of scientific rules and principles (*Leader, Life-long learner, Researcher*)
4. SS4: Inform and communicate pharmaceuticals, special drug group & medical supplies to patients, colleagues, communities and health professionals based on the principle of rational drug therapy (*Caregiver, Communicator*)
5. SS5: Communicate ideas and information in pharmaceutical field effectively, through various forms of media to the academic community, and support preventive and promotive efforts to improve the quality of public health (*Caregiver, Communicator, Researcher*).
6. SS6: Make the right decisions in supervising and evaluating the pharmacy work based on the data analysis, government law and regulation, and professional code of ethics (*Decision-maker, Leader, Manager*)
7. SS7: Manage independent learning to catch up with science and technology development in the field of pharmacy (*Communicator, Manager, Life-long learner*)

### **PROFESSIONAL DEGREE**

Graduates are able to :

1. SS8: Manage and serve the demand of pharmaceutical and medical devices according to

the prevailing standards, either by prescription or non-prescription, accurately and safely (*Caregiver, Leader, Manager*).

2. SS9: Perform formulation, manufacturing and quality assurance of pharmaceutical preparations, on the basis of pharmaceutical science and technology (Decision-maker, Researcher)
3. SS10: Be introspective and do self development according to the development of pharmaceutical science and technology (*Life-long learner, Researcher*)