## **Academic Program of the College of Pharmacy**

# Faculty of Pharmacy – University of Derna

#### **Background**

The Faculty of Pharmacy at the University of Derna was established pursuant to Resolution No. (298) of 2003, issued by the former General People's Committee. Since its inception, the Faculty has been committed to advancing pharmaceutical education, fostering research, and serving the broader community.

#### Vision

To position the Faculty as a leading institution in pharmaceutical education and research, recognized for its academic excellence and its impact on community well-being at the local level.

#### Mission

The Faculty is dedicated to preparing highly qualified pharmacists equipped with robust knowledge, technical proficiency, and critical experience. Graduates are expected to contribute meaningfully to healthcare services, academic institutions, and research endeavors, while demonstrating a genuine commitment to the development and service of their community.

#### Strategic goals

In pursuit of its mission, the Faculty of Pharmacy seeks to achieve the following strategic objectives:

- To cultivate an effective administrative and academic environment that supports the delivery of high-quality educational programs.
- To continuously improve teaching and learning practices in order to enhance students' skills and readiness for careers in pharmaceutical sciences.
- To translate scientific knowledge into tangible benefits for community health and development.
- To ensure the implementation and adherence to recognized standards of quality in education and institutional management.
- To strengthen scientific research capacities in alignment with the evolving needs of the local community

#### **Degrees and Programs**

The Bachelor of Pharmaceutical Sciences program is offered by the Faculty of Pharmacy, granting a specialized university degree in Pharmaceutical Sciences (Bachelor of Pharmaceutical Sciences).

#### **Program Overview**

The Faculty of Pharmacy at the University of Derna offers a **Bachelor of Pharmaceutical Sciences** degree. This undergraduate program is designed to prepare qualified pharmacists

through a comprehensive five-year curriculum that integrates academic knowledge with practical training. The program follows a full academic year system based on credit-hour courses and is structured to develop both scientific expertise and professional competence in the field of pharmacy.

#### 1. Program Structure

The Faculty of Pharmacy adopts a full academic year system based on credit-hour courses. The curriculum is designed to ensure both a solid theoretical foundation and practical competency across all stages of study.

### 2. Duration of Study

The program spans five academic years, including one foundation year followed by four years of specialized pharmaceutical education.

#### Foundation Year (Preparatory Stage):

A one-year introductory phase that bridges secondary education and university-level study. Instruction during this stage is overseen by the Faculty of Science.

#### • First Stage:

Encompasses the first and second academic years, focusing on fundamental pharmaceutical sciences and introductory medical knowledge.

#### Second Stage:

Covers the third and fourth academic years, emphasizing professional training, clinical pharmacy, and advanced pharmaceutical practice.

#### 3. Language of Instruction

English is the primary language of instruction, coursework, and assessment. Arabic may be used as a supplementary language for clarification when needed.

#### 4. Progression and Academic Policies

- Courses may not be carried between academic stages. Within a stage, students may carry up to two courses.
- Students must successfully pass all courses within the current stage in order to progress to the next.
- Those carrying courses are permitted to sit for final exams in those subjects without completing semester work requirements.
- **Passing Grade:** A minimum of 60% is required to pass each course, including at least 35% in the final theoretical exam.

Note: In the Foundation Year, the minimum passing grade is 50% of the total course mark.

#### **5. Attendance Regulations**

Attendance is mandatory from the first day of the academic year. Students are required to attend both theoretical and practical sessions.

- Any student exceeding 25% absence in either component of a course will be disqualified from the final examination for that course.
- No exceptions are permitted. The student will receive a grade of zero in any course for which the absence limit is exceeded.

## 6. Examination Policy

Failure to attend a midterm or final exam without an officially approved excuse will result in a grade of zero for that assessment.

#### **Degree Requirements**

#### **Admission Requirements**

#### Admission Requirements for Libyan Students:

- The applicant must hold a General Secondary School Certificate (Science Section) from a Libyan school or an equivalent certificate recognized by the relevant accreditation authorities.
- 2. The applicant must have achieved the minimum required percentage for admission to faculties of pharmacy, which is **85%** in the year of application, unless otherwise stated by the competent authorities.
- 3. The applicant must be medically fit and capable of attending both theoretical and practical classes.
- 4. The applicant must be of good conduct and not have been convicted of any felony or a crime involving moral turpitude, unless rehabilitated.
- 5. The applicant must not have been previously dismissed from any university, domestically or abroad, for academic or disciplinary reasons.

#### • Admission Requirements for Non-Libyan Students:

In addition to the above-mentioned conditions, the following requirements must also be met:

- 1. The applicant must be a regular resident in Libya for the entire duration of their studies.
- 2. The applicant must commit to paying tuition fees and study expenses in accordance with the regulations in force at universities, unless granted a scholarship—without prejudice to the principles of reciprocal treatment outlined in relevant agreements.
- 3. The applicant must have their foreign secondary school certificate officially equivalated by the competent authorities within a time frame specified by the faculty.

# After passing the preparatory stage, students are admitted to the Faculty of Pharmacy based on the following considerations:

- The faculty's capacity.
- Student preference.

Priority is given to applicants with the highest academic averages.

#### **Department of Pharmaceutics and Industrial Pharmacy**

The Department of Pharmaceutics and Industrial Pharmacy focuses on the scientific principles underlying the formulation, preparation, and evaluation of pharmaceutical dosage forms. The curriculum emphasizes the physicochemical properties of active pharmaceutical ingredients and excipients, and their impact on the stability, bioavailability, and overall effectiveness of drug products.

Students gain in-depth knowledge of the design and manufacturing of various dosage forms, including:

• Solid dosage forms: tablets and capsules

• Semisolid dosage forms: ointments and creams

• **Liquid dosage forms:** solutions and syrups

The department also explores physiological processes that influence drug absorption, distribution, and delivery to target sites, with the aim of optimizing therapeutic outcomes.

Through both theoretical instruction and practical training, the department prepares students for careers in pharmaceutical development, production, and regulatory affairs.

#### **Department of Pharmacognosy**

The Department of Pharmacognosy is one of the fundamental and unique departments in the Faculty of Pharmacy, as it is not commonly found in other scientific faculties. This department specializes in teaching courses that focus on the study and classification of plants, along with an understanding of their various parts. It also covers the identification of biologically active compounds found in plants and other natural sources, as well as methods for their extraction and purification.

The department also offers instruction on drugs derived from natural sources, such as plants, animals, microorganisms, and other biological materials.

#### **Department of Pharmacology and Toxicology**

The department specializes in teaching the different types of drugs and their mechanisms of action on various body systems, as well as their therapeutic indications, side effects, and potential interactions with other medications. Additionally, the department focuses on the study of toxins, including their sources, toxic effects on the human body, and the methods used for their diagnosis and treatment.

### **Department of Pharmaceutical Chemistry**

The department focuses on teaching courses related to the organic preparation of medicinal compounds, exploring the relationship between the structure of drugs and their effects, as well as the principles underlying drug design. It also covers various methods of quality control, including both qualitative and quantitative analysis techniques.

#### **Department of Biomedical Sciences**

The department specializes in teaching courses that focus on studying the processes occurring within cells and how cells, organs, and systems function within the human body. It also emphasizes the development of knowledge and technologies used in healthcare and medical care.

#### **Department of Pharmaceutical Care**

The department specializes in teaching courses that focus on studying diseases and the physiological changes resulting from them. It also covers the logical foundations for selecting drug treatments for acute and chronic conditions, identifying therapeutic problems, and making clinical decisions through the development of individualized treatment plans. Additionally, the department teaches students various skills such as dispensing medications and providing counseling to patients, with the aim of improving patient care within the local community.