



UNIVERSITY OF
PATRAS
ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΑΤΡΩΝ

DEPARTMENT OF PHARMACY

SCHOOL OF HEALTH SCIENCES

UNIVERSITY OF PATRAS
SCHOOL OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY
UNDERGRADUATE STUDIES' COURSES



COURSE DESCRIPTION: **PHARMACEUTICAL PRACTICE**
COURSE CODE: **PHA-E13-NEW**

**PHARMACEUTICAL PRACTICE
COURSE DESCRIPTION**

1. GENERAL

| | | | |
|---|---|----------------------------|------------|
| SCHOOL | HEALTH SCIENCES | | |
| SEPARTMENT | PHARMACY | | |
| LEVEL OF COURSE | UNDERGRADUATE | | |
| COURSE CODE | PHA-E13-NEW | SEMESTER OF STUDIES | 9th |
| COURSE TITLE | PHARMACEUTICAL PRACTICE | | |
| INDEPENDENT TEACHING ACTIVITIES | TEACHING HOURS PER WEEK | ECTS CREDITS | |
| Laboratory Course (Training in Pharmacies open to the public, Hospital Pharmacies, Pharmaceutical Industries) | 15 | 10 | |
| COURSE TYPE | Skills Development | | |
| PREREQUISITE COURSES: | - | | |
| TEACHING AND ASSESSMENT LANGUAGE: | Greek | | |
| THE COURSE IS OFFERED TO ERASMUS STUDENTS | Not offered | | |
| COURSE WEBPAGE (URL) | http://www.pharmacy.upatras.gr/images/DS/PHA-E13-EN.pdf | | |

2. LEARNING OUTCOMES

| Learning Outcomes |
|---|
| <p>This course aims at acquiring knowledge, skills and competences related to Level 6 of the European Qualifications Framework for Lifelong Learning. In particular, the course aims to familiarize students with three of the most important working environments in which a pharmacist will be called upon to practice his / her science and, in particular, the community pharmacy, the hospital pharmacy and the pharmaceutical industry, as well as the acquisition of knowledge related to their organization, administration and operation.</p> <p>Upon successful completion of the course, the students will:</p> <ol style="list-style-type: none"> 1. have proven knowledge and they will be able to understand the specificities of each workplace and the parameters related to the case-by-case practice of pharmaceutical science. 2. have acquired the experience of contacting the client/patient and have understood the specificity of the relationship developed during the practice of the Pharmacist in a (community) pharmacy open to the public. 3. have realized that as health scientists they should have the knowledge and skills to be able to provide health services. 4. have learned to exchange information and knowledge with other health-scientists, especially in the field of the hospital pharmacy |

5. have knowledge of the pharmaceutical industry and the different fields in which a pharmacist can be involved, take up and handle scientifically and professionally, such as management, scientific support, production, quality control, marketing etc.
6. have developed study and perception skills, necessary for their further scientific lifelong training and professional maturity.

General Abilities

- Data and information retrieval, analysis and combination, using the necessary technologies
- Independent work
- Team-work
- Decision making
- Work in an international environment
- Work in an interdisciplinary environment
- Generation of new research ideas
- Promotion of free, creative and inductive thinking

3. COURSE CONTENT

Training in Pharmacies Open to the Public

- Modern Pharmacy Organization
- Pharmaceutical Marketing Information

Training in Hospital Pharmacies

- Particularities of the Hospital Pharmacy
- Issuance and Use of Para-pharmaceuticals
- Fully Hospitalled Pharmaceuticals
- Relationship of the Hospital Pharmacy with other Hospital Units (Labs, Clinics, etc.)

Training in Pharmaceutical Industry

- Land Unit Structure
- Organology - Industrial Practices Procedures
- Scaling-Up
- Drugs Production and related Decision-Making processes
- Organization and Operation of Production Lines

4. TEACHING AND LEARNING METHODS - ASSESSMENT

| | | |
|--|---|--------------------------|
| Teaching method | Face to face. | |
| Use of information and communication technologies | <ul style="list-style-type: none"> • Learning Pharmacy management software • Search techniques for recent data and updates for pharmaceutical products from certified Pharma/Databases (e.g. Medscape) • Familiarization with computer systems related to production and Qualitative and Quantitative control in the Pharmaceutical industry | |
| Teaching organization | Teaching Method | Semester Workload |
| | Personal training in the relevant area (community pharmacy, hospital pharmacy, pharmaceutical industry) with lectures and practice | 195 |
| | Unsupervised study | 55 |
| | Total number of hours for the Course (25 hours of work-load per ECTS credit) | 250 |

| | |
|---------------------------|---|
| STUDENT ASSESSMENT | <p>Assessment language: Greek</p> <ol style="list-style-type: none"> 1. Assessment of written reports from each workplace (pharmacy, hospital pharmacy, industry). 30% of the final grade 2. Written exams: Multiple choice questions, short answer questions, matching questions, terminology understanding assessment. 70% of the final grade |
|---------------------------|---|

5. RECOMMENDED LITERATURE

Suggested Books:

- Remington's Pharmaceutical Sciences, 15th edition and later
- Hellenic Pharmacopoeia
- European Pharmacopoeia
- International Pharmacopoeia

Official Websites (information retrieval)

- World Health Organization
- European Medicines Agency
- Food and Drug Administration (US)
- Medscape
- Others (by case study)