



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: **INTRODUCTION TO PHARMACEUTICAL SCIENCES**
COURSE CODE: **PHA-A12-NEW**

**INTRODUCTION TO PHARMACEUTICAL SCIENCES
COURSE DESCRIPTION**

1. GENERAL

SCHOOL	HEALTH SCIENCES		
DEPARTMENT	PHARMACY		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	PHA-A12-NEW	SEMESTER OF STUDIES	1st
COURSE TITLE	INTRODUCTION TO PHARMACEUTICAL SCIENCES		
	INDEPENDENT TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS
	Lectures	2	6
	Laboratory	4	
COURSE TYPE	General Background Course		
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-A12-EN.pdf		

2. LEARNING OUTCOMES

Learning Outcomes
<p>Generally, this class aims at acquiring knowledge, skills and competences related to Level 6 of the European Qualifications Framework for Lifelong Learning. The aim of the course is that the students:</p> <ol style="list-style-type: none"> 1. Understand the subject of study in the pharmaceutical sciences 2. Know the history and evolution of pharmaceutical sciences 3. Being able to seek and evaluate scientific information in the international literature and to produce useful scientific conclusions 4. Know to use databases with information on the composition, formulation, storage and use of medicines 5. Have developed skills and knowledge relating to basic laboratory handling
GENERAL ABILITIES
<ul style="list-style-type: none"> • Search, analyze and synthesize data and information, using the appropriate technology tools

- Adapt to new situations
- Decision- making
- Independent work
- Group work
- Work in an international environment
- Work in an inter-disciplinary environment
- Develop critical thought towards others and themselves
- Development of free, creative and inductive thinking

3. COURSE CONTENT

Lectures

History of Pharmacy - Milestones of Pharmaceutical Sciences

Organization of studies at the Department of Pharmacy of the University of Patras

Professional aspects of Pharmacy - Specialties

New drug development - Pharmacopoeias

Prospects for evolution in Pharmaceutical Sciences

Laboratory Training

- Scientific Methods in Pharmacy - The search and use of scientific literature
- Microscope use
- Aseptic working methods – Laminar air flow chambers
- Using pipettes
- Using photometers
- Study of bacterial population growth
- Isolation and culture of eukaryotic cells
- Biological systems for the study of the action of chemicals and pharmaceuticals

4. TEACHING AND LEARNING METHODS - ASSESSMENT

Teaching method	Face to Face														
Use of information and communication technologies	Use of E-class platform to communicate with students and manage their tasks Use of PCs in teaching (lectures and lab courses)														
TEACHING ORGANIZATION	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><i>Teaching Method</i></th> <th style="text-align: right;"><i>Semester Workload</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: right;">26</td> </tr> <tr> <td>Tutorial classes</td> <td style="text-align: right;">32</td> </tr> <tr> <td>Study and analysis of scientific papers and book chapters</td> <td style="text-align: right;">16</td> </tr> <tr> <td>Private un-supervised study</td> <td style="text-align: right;">76</td> </tr> <tr> <td colspan="2"><i>Total number of hours for the Course (25 hours of work-load per ECTS credit)</i></td> </tr> <tr> <td></td> <td style="text-align: right;">150</td> </tr> </tbody> </table>	<i>Teaching Method</i>	<i>Semester Workload</i>	Lectures	26	Tutorial classes	32	Study and analysis of scientific papers and book chapters	16	Private un-supervised study	76	<i>Total number of hours for the Course (25 hours of work-load per ECTS credit)</i>			150
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STUDENT ASSESSMENT	<p>Evaluation done in Greek</p> <p>1) In laboratory work: Written and oral examination in each laboratory exercise, work assignment with analysis of the results of the laboratory exercises, final written examination on the material of the laboratory. 50% of the final grade.</p> <p>2) Written exam: Multiple choice questions, pairing Qs, and Qs requiring brief reasoning and justification, 50% of the final grade</p> <p>The assessment criteria are presented to the students during the lectures and the tutorial classes.</p>
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5. RECOMMENDED LITERATURE

Suggested Books:

1. Lecture notes (eclass)
2. Laboratory notes and protocols (eclass)

Suggested websites:

<http://www.ema.europa.eu/ema/>
<https://www.fda.gov/Drugs/InformationOnDrugs/ucm075234.htm>
<http://www.eof.gr/web/guest/publications>