



## Course Syllabus

<b>Course Code</b>	<b>Course Title</b>	<b>ECTS Credits</b>
IMPH-104	Introduction to Pharmaceutical Sciences and Professional Practice/ Εισαγωγή στις Φαρμακευτικές Επιστήμες και στην Επαγγελματική Πρακτική	6
<b>Prerequisites</b>	<b>Department</b>	<b>Semester</b>
None	Health Science	Fall/Spring
<b>Type of Course</b>	<b>Field</b>	<b>Language of Instruction</b>
Required	Pharmacy	Greek/English
<b>Level of Course</b>	<b>Lecturer(s)</b>	<b>Year of Study</b>
1 <sup>st</sup> Cycle	Dr Petrou Christos, Dr Galatou Eleftheria, Ms. Savvidou Antria	1 <sup>st</sup>
<b>Mode of Delivery</b>	<b>Work Placement</b>	<b>Corequisites</b>
Face-to-face	N/A	N/A

### Course Objectives:

The main objectives of the course are to:

- Introduce students to Pharmaceutical Sciences, their evolution and history, the relationships between health, food and drugs and the contents and objectives of each pharmaceutical science, i.e. Pharmacognosy, Pharmaceutical Chemistry, Pharmaceutical Technology, Pharmacology and Toxicology.
- Provide an overview of the sciences of pharmacology, understand the role of experimental pharmacology in the discovery of new drugs
- Appreciate how knowledge of pharmacology contributes to the therapeutic use of medicines
- Provide an overview of pharmacy ethics and legislation
- Understand the role of medicines and pharmacy in patient focused health care
- Describe to history of Pharmacy

### Learning Outcomes:

After completion of the course students are expected to be able to:

- Have a general knowledge of Pharmacy and Pharmaceutical Sciences, their goals and objects so that the lesson to act not only as a general introduction to pharmaceutical sciences.

- Describe in brief the history of Pharmacy and to get to know the development of Pharmacy through the ages and to learn about the prospectives of the pharmaceutical sciences.
- Explain briefly issues such as the organization of studies, professional employment and pharmaceutical disciplines.
- State and understand basic pharmaceutical terms (medications - diseases - safe use of therapeutic agents). Food - Health - relationship with drugs, similarities, differences. Understand the need for new medicines, drug discovery pathways. Students will also be able to explain the role of pharmacists in the preservation of health in society.
- Describe and apply the Pharmacy Ethics, the developing methods for drug discovery, the relationship between food and medicine in normal and pathological conditions. Recognize the prospects of professional and scientific status of pharmacists in an organized and modern society.
- Explain the role and the importance of adverse reactions.

### Course Content:

Introduction to Pharmaceutical Sciences  
Introduction to ancient Eastern civilizations (Assyrians, Babylonians, Sumerians, Egyptians, Jews, Phoenicians, Persians, Indians, Chinese, Japanese, Greek)  
Historical Periods of Pharmaceutical Science in the Mediterranean basin: pre-Hippocratic period  
Hippocratic period from the 5th century until the time of Alexander the Great, Hellenistic or Alexandrian-Byzantine Period, Medieval, Arab-European period, Alchemy and Alchemists  
University education: The Pharmaceutical education during the 12th, 15th and 17th century.  
Pharmacy during the 18th century. Important representatives of this era.  
Scientific Period (from the 19th century until today).  
Achievements of Pharmaceutical Sciences. Development of new medicines: how, purpose.  
Future trends in pharmaceutical sciences.  
Pharmacy profession. Pharmaceutical specialties.  
Details of Pharmacy Ethics (code of ethics, academic integrity)  
Pharmacopoeias and Pharmacy information resources  
Description of pharmaceutical formulations, routes of administration and general terminology of pharmacy.  
Intro to Pharmacovigilance  
Primary health care  
Drug Discovery and Development Process (approaches, timetables, process, objectives, toxicity tests)  
Differential diagnosis  
Clinical studies and ethics  
Medication Errors and Side Effects

### Learning Activities and Teaching Methods:

Lectures, assignments, class discussion

**Assessment Methods:**

Final exam, Midterm exam, assignment
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**Required Textbooks / Readings:**

Title	Author(s)	Publisher	Year	ISBN
Lecturers notes	Dr Christos Petrou			

**Recommended Textbooks / Readings:**

Title	Author(s)	Publisher	Year	ISBN
The Drug Book: From Arsenic to Xanax, 250 Milestones in the History of Drugs	Michael C. Gerald	Sterling (Sterling Milestones)	2013	978-1402782640
Making medicines: A brief history of Pharmacy and Pharmaceuticals	S. Anderson	Pharmaceutical Press	2005	9780857110992
Drugs. A very short introduction	Leslie Iversen	Oxford	2001	9780192854315