



Course Syllabus

Course Code	Course Title	ECTS Credits
IMPH-290	Compounding and Galenic preparations/ Συνταγοτεχνία και Γαληνική Φαρμακευτική	6
Prerequisites	Department	Semester
IMPH-210	Health Sciences	Fall/Spring
Type of Course	Field	Language of Instruction
Compulsory	Pharmacy	English/Greek.
Level of Course	Lecturer(s)	Year of Study
1 st Cycle	Petrides Michael	2 nd
Mode of Delivery	Work Placement	Corequisites
Face-to-Face	Lab exercises	N/A

Course Objectives:

The main objectives of the course are to:

- Demonstrate and apply the “compounding art”, i.e. the art of preparing various Galenic pharmaco-technological forms, usually made in a pharmacy (community or hospital)
- Explain the safe arrangement of drugs, chemicals and poisons
- Review the contents and objectives of the Pharmacopoeias, Martindale and Pharmaceutical Excipients Handbook in order to use them properly
- Identify the responsibility of the pharmaceutical scientist with regards to Galenic products’ compounding

Learning Outcomes:

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

1. Apply their knowledge on the preparation, storage and application of the galenic preparations made in the pharmacy
2. Understand how to read and dispense galenic prescriptions and explain anything relevant
 - a. to maintaining the quality of prescribing and dispensing such prescriptions in the lab
3. Apply their knowledge on how to arrange and keep safely and conveniently drug products, narcotics and toxic products included

4. Define the packaging materials of dosage forms and choose appropriate containers for the galenic products they compound
5. Recall the storage conditions of galenic products, their discard dates, as well as the labels that have to be attached
6. Execute Dosimetry calculations
7. Interpret and use data found in a pharmacopoeia

Course Content:

- Definition and meaning of prescription (the prescription form, symbols, abbreviations)
- Dosimetry
- Use of Pharmacopoeias, Martindale, Handbook of Pharmaceutical Excipients
- Definition, properties, manufacturing, stability of the following Galenic dosage forms:
 - Powders
 - Solutions, Elixirs, Lotions, Liniments
 - Syrups
 - Suppositories
 - Pessaries
 - Emulsions
 - Suspensions
 - Mucilages
 - Ointments
 - Creams
 - Gels
 - Pastes
- Drug's storage and stability
- Packaging materials – containers
- Labels

Lab exercises:

Lab exercise 1: Preparation of the pharmaco-technological form “*Powders*”.

Lab exercise 2: Preparation of the pharmaco-technological form “*Solutions*”.

Lab exercise 3: Preparation of the pharmaco-technological form “*Suppositories*”.

Lab exercise 4: Preparation of the pharmaco-technological forms “*Pessaries – Vaginal suppositories*” and “*Gummy lozenges*”.

Lab exercise 5: Preparation of the pharmaco-technological forms “*Emulsions*” and “*Creams*”.

Lab exercise 6: Preparation of the pharmaco-technological form “*Suspensions*”.

Lab exercise 7: Preparation of the pharmaco-technological form “*Ointments - Pastes*”.

Learning Activities and Teaching Methods:

Lectures, individual work (researching Pharmacopoeia/Martindale/Handbook of Pharmaceutical Excipients), lab exercises, videos (how to produce various galenic forms).

Assessment Methods:

Midterm exam, final exam, Lab exam (researching Pharmacopoeias/Martindale/Handbook of Pharmaceutical Excipients in order to suggest the manufacturing steps of an unknown prescription; dispensing prescriptions known from the lab)

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Lecturer's notes				
«Επί του εργαστηρίου»	Τάκης Κανακάρης	Φαρμακευτικός κόσμος	2015	960-86829-0-8
"Pharmaceutical Compounding and Dispensing"	John F. Marriott, Keith A. Wilson, Christopher A. Langley, Dawn Belcher	Pharmaceutical Press	2009	978 0 85369 575 2
"Applied Pharmaceutics in Contemporary Compounding" 3rd edition	Robert P. Shrewsbury	Morton Publishing Company	2015	978-1617312298
«Γαληνική Φαρμακευτική»	Σταύρος Κατσιώτης	Πήγασος	1997	960-317-033-X
"Modern Dispensing Pharmacy"	Jain, N.K., Gupta, G.D.	Pharma Book Syndicate (E-book, E-brary)	2008	(E-book ISBN) 9789350435175
http://site.ebrary.com/lib/unicosia/detail.action?docID=10415580&p00=%3Fmodern+dispensing+pharmacy%3F				

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
"Pharmaceutical Practice"	A. J. Winfield, R. M.E. Richards	Churchill Livingstone	2004	0-443-07206-X
Aulton's Pharmaceutics: The design and manufacture of medicines	Michael E. Aulton, Kevin M. G. Taylor	Churchill Livingstone	2013	978-0-7020- 4290-4