

Course Title	<b>Galenic Pharmacy</b>				
Course Code	PHA415				
Course Type	Pharmacy Elective				
Level	BSc (Level 1) / MPharm (Level 2)				
Year / Semester	2 <sup>nd</sup> / 4 <sup>th</sup> Semester				
Teacher's Name	Prof S. Malamataris , Dr Th. Karydas.				
ECTS	6	Lectures / week	3	Laboratories/week	-
Course Purpose	<p>The main goal of this course is to provide students with the necessary knowledge to understand a prescription as well as to fulfill it, in order to prepare a perfect pharmaceutical formulation for administration to patients. In addition, the course aims to provide students the appropriate background, so that they are able to identify the raw materials used for fulfilling a prescription, as well as familiarize with the various techniques for preparation of pharmaceutical products.</p>				
Learning Outcomes	<p>Students are expected to:</p> <ul style="list-style-type: none"> <li>Recognize the parts that make up a prescription.</li> <li>Decode the various symbols used for writing a prescription.</li> <li>Perform mathematical calculations based on the contents of a prescription to find the appropriate dosage to be administered to the patient.</li> <li>Understand the reason for the existence of Pharmacopoeia and the various parts it includes.</li> <li>Distinguish the different types of pharmaceutical forms as well as the advantages and disadvantages of each one.</li> <li>Recognize the type of formulation listed on a prescription, based on the ingredients and the preparation method.</li> <li>Analyze the basic properties and preparation processes of liquid formulations.</li> <li>Get familiarized with techniques of preparation of semi-solid pharmaceutical forms, such as creams, ointments, suppositories, vaginal pellets.</li> <li>Distinguish the special conditions for the preparation of parenteral formulations and the main sterilization methods used.</li> <li>Understand the basic properties and methods for emulsions and suspensions preparation, as well as the various substances that stabilize these products.</li> <li>Distinguish the different types of excipients used in solid pharmaceutical forms, such as tablets, granules, capsules.</li> <li>Understand the basic methods of preparation of solid pharmaceutical forms (tablets, granules, capsules).</li> </ul>				

	Describe ways of packing and storing various galenic preparations.		
Prerequisites	-	Corequisites	-
Course Content	<p>Definition and Concept of the prescription</p> <p>Prescription form, symbols, abbreviations, special categories of prescriptions (prescriptions for narcotics).</p> <p>Dosimetry, numerical problems on prescriptions.</p> <p>Pharmaceutical forms: definitions, use, advantages, disadvantages.</p> <p>Liquid pharmaceutical forms: solutions, syrups, drops (ophthalmic, nasal, ear), syrups, emulsions, suspensions (methods of preparation and excipients)</p> <p>Ointments, creams (properties, excipients, methods of preparation).</p> <p>Suppositories, vaginal pellets (properties, excipients, methods of preparation).</p> <p>Parenteral preparations (properties, excipients, preparation, sterilization).</p> <p>Solid formulations: tablets, granules, capsules (properties, excipients, methods of preparation).</p> <p>Packaging materials for pharmaceutical forms, receptacles, caps, labels.</p>		
Teaching Methodology	<p>Teaching methodology includes lectures, case studies and problem solving tutorials to offer the theoretical background and exercises in order to better understand the aspects of galenic pharmacy. Detailed notes with PowerPoint are used in the lesson. Image-rich material and short animations are used to comprehend the various processes. Methods such as discussion, questions/answers, pros/cons and debates are used to enhance student's participation.</p>		
Bibliography	<p>Textbooks:</p> <ul style="list-style-type: none"> <li>• Galenic Pharmacy: A practical handbook to the processes of the British Pharmacopoeia, Richard Augustus Crip[s], 2018</li> <li>• Γαληνική Φαρμακευτική, Σταύρος Κατσιώτης, Εκδ. Πήγασος, 2000</li> </ul> <p>References:</p> <ul style="list-style-type: none"> <li>• Remington: The science and practice of pharmacy, David Troy, Paul Beringer, 2006</li> </ul>		
Assessment	<ul style="list-style-type: none"> <li>• Mid Term Exam and exercises <b>50%</b></li> <li>• Final Examination <b>50%</b></li> </ul> <p>Course evaluation is done by:</p> <p>(a) a written examination and exercises assigned to students during the semester account for 50% of the total grade</p> <p>(b) a final written examination which examines all modules of the course material and it accounts for 50% of the total grade.</p> <p>Students are prepared for the above written exams over the theoretical and practical background in the classroom and with additional exercises</p>		

	<p>given to them for further practice. For the better comprehension of the subject frequent revisions are performed at regular intervals.</p> <p>Questions of gradual difficulty apply to the evaluation of the mid-term and final examination. There may be multiple choice or right/wrong questions with justification of the answers or issue analysis and problem solving questions may be applied in order to evaluate the knowledge and perception of the student on the subject.</p> <p>The above criteria and assessment tools, as well as their weight, are communicated to the students, and are formulated in such a way in order to maximize the expected learning outcomes as well as the quality of the course.</p>
Language	Greek, English