

Bachelor Clinical Pharmacy program					
Name of the course	Code	Credit hours			Overall aims of the course
		Theoretical	Practical	Total	
Biopharmaceutics and Pharmacokinetics	PT 609	2 hours	1 hour	3 hours	<ul style="list-style-type: none"> <li>• The course aims to provide the students with the necessary knowledge related to different factors affecting dosage forms performance in vitro &amp; in vivo.</li> <li>• It makes the students able to evaluate the rate &amp; extent of drug released from the dosage forms reaching the systemic circulation.</li> <li>• It gives the students specialized knowledge to understand bioequivalence concept.</li> <li>• It allows the student to explore the kinetics of the drug “journey” in the human body.</li> </ul>
Clinical pharmacokinetics	PP 907	2 hours	1 hour	3 hours	The main objective of the course is to provide the student with the basic concepts and skills needed to apply pharmacokinetics (PKs) in therapeutics, i.e. interpretation of pharmacokinetic monographs, selection and design of individualized drug therapy as well as appropriately monitoring patients for therapeutic response and adverse drug effects.
Clinical pharmacy -1	PP 702	2 hours	1 hour	3 hours	This course aims to provide students with the basic knowledge & skills necessary for an effective clinical pharmacy practitioner capable

					<p>of performing various clinical services including: counseling services, consultation services, education services, assessment &amp; individualisation of patient medication regimen, monitoring services, documentation services, Social and behavioral sciences relevant to pharmacy and ethics of health care will also be recalled.</p>
Clinical Pharmacy-2	PP 805	2 hours	1 hour	3 hours	<p>The overall goal of clinical pharmacy activities is to promote the correct and appropriate use of medicinal products and devices and these activities include: maximising the clinical effect of medicines, minimising the risk of treatment-induced adverse events, minimising the expenditures for pharmacological treatments born by the national health systems and by the patients.</p>
Community pharmacy practice	PT 608	2 hours	1 hour	3 hours	<p>The course aims to prepare students to deliver pharmacy services in community pharmacy practice, applying pharmaceutical care concepts. The course also aims to make students aware of the role of the pharmacist in management of symptoms of certain diseases. The course should also help students acquire skills of professional communication, patient counseling, problem solving as well as prescription revision,</p>

					OTC products dispensing and home-used device handling.
Controlled drug delivery system	PT 704	2 hours	-	2 hours	<p>The main objective of the course is to introduce the student to the basic concepts of controlled release &amp; targeted drug delivery including the advantages, factors affecting the design of successful drug delivery system.</p> <p>An over view for the main types of controlled drug delivery systems including: oral, pulmonary, transdermal, ocular, parenteral nasal, implantable, cranial, vaginal will be discussed.</p>
Cosmetics	PTE-13	2 hours	2 hours	4 hours	<p>This course aims at providing a good knowledge of cosmetic products regarding their nature as well as formulations, indications and unwanted effects. This information is of particular interest for conveying proper counseling to consumers looking for pharmacist's consultation as a drug expert. Further, the study of hair preparation, bath preparation, fragrance preparation, make-up preparation, nail lacquers, shaving preparations, after-shave preparations, skin care, anal hygiene products, antiperspirants and deodorants. The ingredients involved in different cosmetic preparations and the methods of production will be implemented in the field of industrial pharmacy for manufacture of these products.</p>
Drug Information	PP 015	1 hour	-	1 hour	The course aims to familiarize students with the

					acute toxicity in humans of common drugs and chemicals, the prevention and managements of poisoning with these substances and with the role of the pharmacists as providers of poison information. It is also designed to develop students' skills of retrieving up-to-date drug information. The course describes the pathophysiology and clinical manifestations associated with poisoning from different materials. It also aims to achieve in the students a level of knowledge and understanding of adverse drug interactions and IV incompatibilities.
Drug Marketing	PP 806	1 hour	-	1 hour	<p>This course aims to provide the students with the necessary information related to FDA regulations concerning prescription drug marketing, purchase and resale of drug products as well as product returns.</p> <p>The course enables the students to perform marketing analysis and sales management through drug distribution data (DDD).</p> <p>It gives the students specialized experience concerning drug advertising, cost estimation of new product ventures, and management of pedigrees and counterfeiting</p>
Hospital Pharmacy	PP 703	2 hours	1 hour	3 hours	The course aims to prepare the students to

					<p>understand the pharmacist role in the hospital pharmacy and therapeutics committee. It also aims to provide the student with the necessary knowledge related to hospital pharmacist activities, either administrative or technical.</p>
Medical Terminology	EN 302	2 hours	-	2 hours	<p>The course aims to study medical terminology, terms in pharmacy and principles of health care language; focusing on prefixes, suffixes, word roots and their combining forms by review of each body system and specialty area. It also emphasizes word construction, spelling, usage, comprehension, and pronunciation. In addition, students gain information regarding anatomy, physiology, symptomatology, pathology, diagnostic/surgical procedures, pharmacology, and abbreviations; then how to develop the gained knowledge in communications with other health – care providers.</p>
Pharmaceutical Dosage Form (I)	PT 403	2 hours	1 hour	3 hours	<p>The course aims at making the students familiar with common dosage forms in use today. The course introduces the basics of each dosage form, pharmaceutical excipients, and factors affecting dosage form design with a special emphasis to solid dosage forms such as powders, tablets and capsules. The course aims also to provide basic understanding of</p>

					micromeritics, disperse systems and microencapsulation technique.
Pharmaceutical Dosage Form -2	PT 505	2 hours	1 hour	3 hours	<ul style="list-style-type: none"> <li>Define and prepare various semisolid, transdermal, topical dosage forms and suppositories, according to the official procedures..</li> <li>Define sterile dosage forms (parenteral and ophthalmic) and identify the basic ingredients that are used for their formulation.</li> <li>Discuss aspects of dosage form development and packaging.</li> <li>Outline and apply the quality control tests used to evaluate the above mentioned dosage forms.</li> </ul>
Pharmacy administration	PT 506	2 hours	-	2 hours	The course provides an insight on major pharmacy administration aspects concerning community pharmacist including capital requirements, financing a new pharmacy and interpersonal communication.
Pharmacy Legislation	PT 404	1 hour	-	1 hour	<p>This course is a study of laws and regulations related to all aspects of the profession of pharmacy, namely legal and ethical principles.</p> <p>This course aims to emphasize the evaluation of non-prescription medications and appliances. It also aims to pay the student's attention to the ethic code which is connected to some aspects</p>

					of pharmaceutical legislation, so the pharmacist is to be confident in the application of the current laws pertaining to pharmacy.
Pharmacy Orientation	PT 202	2 hours	-	2 hours	The course aims to introduce pharmacy as an art and as a profession to the newly admitted pharmacy students. Thus, this course will enable the entry-level students to understand and acquire the skills necessary for pharmacy education and to realize the role of pharmacist in the society and ethics of pharmacy.
Physical Pharmacy	PT 201	2 hours	1 hour	3 hours	This course aims to introduce the students to physical pharmacy that aids them to understand the basic concepts necessary for formulation and development of pharmaceutical products. By the end of the course students will have basic knowledge in the areas of solutions and solubility, surface phenomena, rheology, colloidal disperse systems and coarse dispersions.
Radiopharmaceuticals	PP 701	1 hour	-	1 hour	The course aims at understanding the basic principles involved in the application of radiation and radioactive nucleotides in medical diagnosis, therapy and industry.