Study Plan for Master Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0413-4.0E

Course Plan for Pharmaceutical Sciences (Master Program) No.: (2021/2022)			
Approved by Deans Council by Decision (14/20/2020-2021) Dated (12/08/2021)			
(33) Credit Hours		Study System / Hybrid Program	
Type of Specialty	☐ Humanitarian	☐ Scientific / Technical	☑ Medical Sciences

Teaching Style	Percentage of Study Plan Hours / Number	Model Used (Synchronous: Asynchronous)
Complete E-Learning Courses	**18.182% / (6) Credit Hours**	**1:1**
Blended Learning Courses (for Humanity)	40%-60% Maximum / () Credit Hours	1:1
Blended Learning Courses (for Scientific and Medical)	**36.364% / (12) Credit Hours**	**1:1**
Traditional Learning Courses (for Humanity)	20% Minimum / () Credit Hours	1:0
Traditional Learning Courses (for Scientific and Medical)	**45.454% / (15) Credit Hours**	**1:0**

Important note: (The teaching patterns of the subjects are distributed at all academic levels in the program)

Program Vision: **Excellence and leadership in the Pharmaceutical Sciences graduate program to meet the needs of the community and enhance competitiveness locally, regionally and internationally.**

Program Mission and Objectives:

1. **Providing a multidisciplinary education in the field of pharmaceutical sciences to students enrolled in our graduate program.**
2. **Maintaining innovative research in the field of pharmaceutical sciences, which contributes to an advanced understanding of various research areas, such as pharmaceutical chemistry, pharmaceutics, and clinical pharmacy.**
3. **Supplying graduate students with all the resources needed to perform their research projects effectively.**
4. **Continuously developing the Pharmaceutical Sciences graduate program by employing feedback results from graduates, employers, and faculty members, along with the continuous follow-up of scientific developments in the various fields of Pharmacy.**
5. **Encouraging graduate students to participate in international student exchange programs with prestigious universities to boost their knowledge and skills in pharmaceutical sciences.**

Program Learning Outcomes *(MK= Main Knowledge, MS= Main Skills, MC= Main Competencies)*

Main Knowledge **The graduate student should be able to:**	
MK1	Acquire advanced knowledge in pharmaceutical chemistry.
MK2	Relate the latest advances in clinical studies to achieve an improved understanding of pharmaceutical sciences.
MK3	Recognize innovative concepts in pharmaceutical development and drug delivery.
Main Skills **The graduate student should be able to:**	
MS1	Analyze and explain research articles based on knowledge and practice obtained throughout the program.
MS2	Apply the knowledge obtained throughout the program to carry out the needed practical work to support the Thesis or Research Project.
MS3	Perform statistical analyses of research data and present them in a meaningful way.
MS4	Apply appropriate methodologies to solve novel and emerging problems related to pharmaceutical and clinical sciences.
Main Competencies **The graduate student should be able to:**	
MC1	Take responsibility by continuously developing professional and personal performance.
MC2	Stay up-to-date with the latest advances in pharmaceutical research.
MC3	Communicate research results effectively and clearly.

1. Master Thesis Program (33) Credit Hours:

Teaching Style			Course No.	Course Name	Credit Hour	Indicative		Notes
Fully Electronic Learning	Blended Learning	Traditional Learning				Semester	Year	
1. Mandatory Requirements (18) Credit Hours								
		.	0201705	Research Methodology and Biostatistics	3	1	1	
	.		0201766	Advanced Pharmaceutical Technology	3	1	1	
	.		0201726	Clinical Pharmacology and Therapeutics	3	2	1	
		.	0201741	Advanced Pharmaceutical Analysis	3	2	1	
	.		0201743	Advanced Medicinal Chemistry and Drug Design	3	2	1	
	.		0201765	Advanced Biopharmaceutics and Pharmacokinetics	3	1	2	
2. Electives Requirements (6) Credit Hours								
.			0201700	Advanced Pharmaceutical Organic Chemistry	3	1	1	
.			0201711	Advanced Clinical Biochemistry	3	1	1	
.			0201724	Pharmacogenetics	3	1	1	
.			0201744	Natural Products	3	1	1	
.			0201764	Pharmaceutical Biotechnology	3	2	1	
.			0201768	Advanced Drug Delivery	3	2	1	
.			0201725	Advanced Therapeutics	3	1	2	
3. Thesis (9) Credit Hours								

2. Comprehensive Exam Program (33) Credit Hours:

Teaching Style			Course No.	Course Name	Credit Hour	Indicative		Notes
Fully Electronic Learning	Blended Learning	Traditional Learning				Semester	Year	
1. Mandatory Requirements (27) Credit Hours								
		.	0201705	Research Methodology and Biostatistics	3	1	1	
		.	0201707	Advanced Organic Chemistry	3	1	1	
	.		0201766	Advanced Pharmaceutical Technology	3	1	1	
	.		0201726	Clinical Pharmacology and Therapeutics	3	2	1	
		.	0201741	Advanced Pharmaceutical Analysis	3	2	1	
	.		0201743	Advanced Medicinal Chemistry and Drug Design	3	2	1	
	.		0201765	Advanced Biopharmaceutics and Pharmacokinetics	3	1	2	
		.	0201767	Advanced Pharmaceutical Microbiology	3	1	2	
		.	0201706	Research Project	3	2	2	
2. Electives Requirements (6) Credit Hours								
.			0201711	Advanced Clinical Biochemistry	3	1	1	
.			0201724	Pharmacogenetics	3	1	1	
.			0201744	Natural Products	3	1	1	
.			0201764	Pharmaceutical Biotechnology	3	2	1	
.			0201768	Advanced Drug Delivery	3	2	1	
.			0201725	Advanced Therapeutics	3	1	2	
3. Comprehensive Exam (0) Credit Hours								

(The end of the study plan for the major students)

Subjects Taught for Students of "Master Degree in Clinical Nursing / Adult"

Teaching Style			Course No.	Course Name	Credit Hour	Indicative		Notes
Fully Electronic Learning	Blended Learning	Traditional Learning				Semester	Year	
.			0201701	Advanced Pathophysiology for Nurses	3	1	1	
	.		0201723	Advanced Pharmacology for Nurses	2	1	1	