

جامعة الزقازيق



كلية الصيدلة



اللائحة الداخلية المعدلة كلية الصيدلة- جامعة الزقازيق

برنامج بكالوريوس الصيدلة (فارم دي - Pharm D)

طبقا لنظام الساعات المعتمدة

٢٠٢٤

Elective Courses

مقررات اختيارية

The Faculty of Pharmacy offers elective courses from which the students are free to select eight credit hours.

Course Code	Course Title	Credit Hours			Prerequisite
		L	P/T	Total	
PM E 07	Gene Regulation and Epigenetic	1	1	2	General Microbiology and Immunology
PM E 08	Infection Control	1	1	2	Pharmaceutical Microbiology
PG E 08	Chromatography and Separation Techniques	1	1	2	Phytochemistry II
PG E 09	Analysis of Food and Flavor	1	1	2	Phytochemistry I Phytochemistry II
PA E 06	Advanced Pharmaceutical Analysis – Spectroscopy	1	1	2	Instrumental Analysis
PO E 08	Veterinary Pharmacology	1	1	2	Pharmacology IV
PO E 09	Biological Standardization	1	1	2	Pharmacology III
MD E 07	Bioinformatics	1	1	2	Biotechnology & Molecular Biology
PP E 08	Oncology	1	1	2	Pharmacology IV
PP E 09	Pediatrics & Geriatric	1	1	2	Pharmacology IV
PT E 012	Cosmetic Preparations	1	1	2	Pharmaceutics II Pharmaceutics III
PT E 013	Applied Industrial Pharmacy	1	1	2	Pharmaceutical Technology I Pharmaceutical Technology II
PB E 05	Clinical Nutrition	1	1	2	Clinical Biochemistry

L: Lecture P: Practical T: Tutorial

- لمجلس الكلية طرح المقررات الإختيارية من الامثلة المذكورة بالجدول السابق في كل مستوى/فصل دراسي وذلك بعد إختيار الطلاب وتخطر مجالس الأقسام العلمية المختصة ويمكن للكلية إضافة مقررات إختيارية أخرى ويشترط موافقة مجلس الجامعة بعد إبداء المبررات اللازمة.

مرفق رقم ٢
خاص بالمادة رقم (١٨)
الخطة الدراسية

17- Programme Curriculum (6 cr. Hours of university requirements + 172 Cr hours of professional program)

Table (1)

Semester (1)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect.	Pract.	Total		Period/Act.	Pract.	Wr.	Oral		
Pharmaceutical Analytical Chemistry I	PA 101	2	1	3	Registration	15	25	50	10	100	2
Pharmaceutical Organic Chemistry I	PR 101	2	1	3	Registration	15	25	50	10	100	2
Pharmacy Orientation	PT 101	1	-	1	Registration	25	--	75	---	100	1
Medicinal Plants	PG 101	2	1	3	Registration	15	25	50	10	100	2
Medical Terminology	MD 101	1	-	1	Registration	25	-	75	-	100	1
Information Technology***	NP 101	1	1	2	Registration	15	25	60	-	100	1
Mathematics	NP 102	1	---	1	Registration	25	--	75	--	100	1
English language-I	UR 101	1	---	1	Registration	25	---	75	---	pass	1
Social Issues	UR 102	1	---	1	Registration	25	--	75	--	pass	1
Total		12	4	16						700	

○ *Lect.* = Lecture , *Period. /Act.*= Periodical/Activity ,*Pract.* = Practical, *Wr.* = Written, UR: مقرر لا تضاف للمجموع *** supervised by pharmacy practice department

Table (2)

Semester (2)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect.	Pract.	Total		Period./Act.	Pract.	Wr.	Oral		
Pharmaceutical Analytical Chemistry II	PA 202	2	1	3	Registration	15	25	50	10	100	2
Pharmaceutical Organic Chemistry II	PR 202	2	1	3	Pharmaceutical Organic Chemistry-I	15	25	50	10	100	2
Anatomy& Histology	MD 202	2	1	3	Registration	15	25	60	-	100	2
Physical Pharmacy	PT 202	2	1	3	Registration	15	25	50	10	100	2
Pharmacognosy I	PG 202	2	1	3	Medicinal Plants	15	25	50	10	100	2
Psychology	UR 203	1	-	1	Registration	25	-	75	-	pass	1
Cell Biology	PB 201	1	1	2	Registration	15	25	50	10	100	1
Principle of Quality	UR 204	1	-	1	Registration	25	-	75	-	pass	1
English language-II	UR 205	1	-	1	English Language-I	25	-	75	-	pass	1
Total		14	6	20						600	

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Table (3)

Semester (3)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect.	Pract.	Total		Period/Act..	Pract.	Wr.	Oral		
Pharmaceutical Analytical Chemistry III	PA 303	1	1	2	Pharmaceutical Analytical Chemistry I	15	25	50	10	100	1
Pharmaceutical Organic Chemistry III	PR 303	2	1	3	Pharmaceutical Organic Chemistry-II	15	25	50	10	100	2
Pharmacognosy II	PG 303	2	1	3	Medicinal Plant	15	25	50	10	100	2
Biophysics	MD 303	1	1	2	Registration	15	25	50	10	100	1
Physiology and Pathophysiology	MD 304	2	1	3	Registration	15	25	50	10	100	2
General Microbiology and Immunology	PM 301	2	1	3	Cell Biology	15	25	50	10	100	2
Pharmaceutics I	PT 303	2	1	3	Physical Pharmacy	15	25	50	10	100	2
Total		12	7	19						700	

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Table (4)

Semester (4)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect.	Pract.	Total		Period./Act.	Pract.	Wr.	Oral		
Biochemistry I	PB 402	2	1	3	Pharmaceutical Organic Chemistry I	15	25	50	10	100	2
Instrumental Analysis	PA 404	2	1	3	Pharmaceutical Analytical Chemistry II	15	25	50	10	100	2
Pathology	MD 405	1	1	2	Anatomy & Histology	15	25	50	10	100	1
Pharmaceutics II	PT 404	2	1	3	Pharmaceutics I	15	25	50	10	100	2
Pharmacology-1	PO 401	2	1	3	Physiology	15	25	50	10	100	2
Raw material	PR 404	1	1	2	Pharmaceutical Organic Chemistry-III	15	25	50	10	100	1
Scientific Writing and Communication skills*	NP 403	1	1	2	English Language II	15	25	60	---	100	1
Pharmaceutical Legislations and Professional ethics**	NP 404	1	-	1	Registration	25	-	75	-	100	1
Total		12	7	19						800	

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○ * Taught by pharmacy practice department

** Taught by pharmaceuticals department

Table (5)

Semester (5)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect.	Pract.	Total		Period./Act.	Pract.	Wr.	Oral		
Biochemistry II	PB 503	2	1	3	Biochemistry I	15	25	50	10	100	2
Pharmaceutical Microbiology	PM 502	2	1	3	General Microbiology and Immunology	15	25	50	10	100	2
Phytochemistry I	PG 504	2	1	3	Pharmacognosy I Pharmacognosy II	15	25	50	10	100	2
Pharmaceutics III	PT 505	2	1	3	Physical Pharmacy	15	25	50	10	100	2
Medicinal Chemistry I	PC 501	2	1	3	Pharmaceutical organic III	15	25	50	10	100	2
Pharmacology II	PO 502	2	1	3	Pharmacology I	15	25	50	10	100	2
Total		12	6	18						600	

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Table (6)

Semester (6)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect.	Pract.	Total		Period./Act.	Pract.	Wr.	Oral		
Parasitology and Virology	PM 603	2	1	3	General Microbiology and Immunology	15	25	50	10	100	2
Pharmaceutics IV	PT 606	2	1	3	Pharmaceutics I	15	25	50	10	100	2
Biopharmaceutics and Pharmacokinetics	PT 607	2	1	3	Pharmaceutics III	15	25	50	10	100	2
Phytochemistry II	PG 605	2	1	3	Pharmacognosy I Pharmacognosy II	15	25	50	10	100	2
Pharmacology III	PO 603	2	1	3	Pharmacology-I	15	25	50	10	100	2
Medicinal Chemistry II	PC 602	2	1	3	Organic Chemistry - III	15	25	50	10	100	2
Total		12	6	18						600	

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Table (7)

Semester (7)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect.	Pract.	Total		Period./Act.	Pract.	Wr.	Oral		
Clinical Biochemistry	PB 704	2	1	3	Biochemistry II	15	25	50	10	100	2
Medical Microbiology	PM 704	2	1	3	General Microbiology and Immunology	15	25	50	10	100	2
Pharmacology IV	PO 704	1	1	2	Pharmacology I	15	25	50	10	100	1
Applied & Forensic Pharmacognosy	PG 706	1	1	2	Phytochemistry-I Phytochemistry-II	15	25	50	10	100	1
Medicinal Chemistry III	PC 703	2	1	3	Organic Chemistry III	15	25	50	10	100	2
Pharmaceutical Technology I	PT 708	2	1	3	Pharmaceutics III	15	25	50	10	100	2
Elective	PE	1	1	2	Prerequisite	15	25	50	10	100	1
Total		11	7	18						700	

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Table (8)

Semester (8)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect .	Pract.	Total		Period./Act.	Pract.	Wr.	Oral		
Clinical Pharmacokinetics	PP 801	2	1	3	Biopharmaceutics and Pharmacokinetics	15	25	50	10	100	2
Drug Design	PC 804	1	1	2	Pharmaceutical Organic Chemistry III	15	25	50	10	100	1
Basic & Clinical Toxicology	PO 805	2	1	3	Pharmacology I	15	25	50	10	100	2
Biotechnology & Molecular biology	PM 805	2	1	3	Pharmaceutical Microbiology	15	25	50	10	100	2
Hospital Pharmacy	PP 802	1	1	2	Pharmacology II Pharmaceutics IV	15	25	50	10	100	1
Pharmaceutical Technology II	PT 809	1	1	2	Pharmaceutical Technology I	15	25	50	10	100	1
Elective	PE ---	1	1	2	Prerequisite	15	25	50	10	100	1
Total		10	7	17						700	

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Table (9)

Semester (9)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect.	Pract.	Total		Period./Act.	Pract.	Wr.	Oral		
Clinical Pharmacy & Pharmacotherapeutics I	PP 903	2	1	3	Basic & Clinical Toxicology	15	25	50	10	100	2
Drug Information	PO 906	1	0	1	Pharmacology-III	٢٥	---	٧٥	---	100	1
Community Pharmacy Practice	PP 904	2	1	3	Pharmacology III	15	25	50	10	100	2
Good Manufacturing Practice	PT 910	1	1	2	Pharmaceutical Technology I Pharmaceutical Technology II	15	25	50	10	100	1
Quality Control of Pharmaceuticals	PA 905	2	1	3	Instrumental analysis	15	25	50	10	100	2
Marketing & Pharmacoeconomics***	NP 905	1	--	1	Hospital Pharmacy	25	---	75	--	100	1
First Aid and Basic Life Support	MD 906	1	--	1	Basic & Clinical Toxicology	٢٥	---	٧٥	--	100	1
Elective	PE ---	1	1	2	Prerequisite	15	25	50	10	100	1
Total		11	5	16						800	

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Table (10)

Semester (10)

Course Title	Course Code	Credit Hours			Prerequisite	Examination Marks				Total Marks	Final Exam. Hours
		Lect.	Pract.	Total		Period./Act.	Pract.	Wr.	Oral		
Phytotherapy and Aromatherapy	PG 007	2	1	3	Phytochemistry-I Phytochemistry-II	15	25	50	10	100	2
Advanced Drug Delivery Systems	PT 011	2	-	2	Bio Pharmaceutics and Pharmacokinetics	25	-	75	-	100	2
Public Health and Preventive Medicine	PM 006	2	-	2	Medical Microbiology	15	--	75	10	100	2
Clinical pharmacy & Pharmacotherapeutics II	PP 005	1	1	2	Clinical Pharmacy & Pharmacotherapeutics I	15	25	50	10	100	1
Drug Interaction	PP 006	1	1	2	Pharmacology-III	15	25	50	10	100	1
Clinical Research methodology & Pharmacovigilance	PP 007	1	1	2	Drug information	15	25	60	-	100	1
Biostatistics	PO 007	1	--	1	Pharmacology-III	25	-	75	-	100	1
Entrepreneurship***	UR 006	1	-	1	Principle of quality assurance	25	-	75	-	pass	1
Elective	PE	1	1	2	Prerequisite	15	25	50	10	100	1
Total		12	5	17						800	

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