قائمة مقررات درجة دكتوراه الفلسفة في العلوم الصيدلية قسم الكيمياء التحليلية الصيدلية

۱- Specialized : (18 cr. h) د مقررات تخصصية: Courses

First Semester (9 cr. h)

No.	Course	Courses		Courses		Credit hours	
110.	code		L	P			
1		Quality Control ofالرقابة الدوائيةPharmaceuticalالصيدلية					
	0607801	المستحضرات الصيدلية Pharmaceutical	2				
		Products					
2	0607802	طرق التحليل المتخصصة Specialized Analytical	2				
		Techniques	4				
3	0607803	Seminar I القائي I	2				
4		مقرر اختياري Elective Course	3				
Total				9			

Second Semester (9 cr. h)

No	Course	Courses		Courses		Credit hours	
No.	code		L	P			
5	0607804	Advanced Separation الفصل المتقدم	3				
6	0607805	الطرق القياسية الكيميائية Laboratory Intelligence وطرق الذكاء الاصطناعي Methods	3	-1			
7	0607806	Seminar II II القائي II	3				
Total			9				

Elective Courses

		Courses	Credit	
No.	Course		ho	urs
	code		L	P
1	0601808	التقدم في التكنولوجيا النانو Advances in	3	
	0001808	الحيوية Nanobiotechnology	3	
2	0604805	المراقبة الميكروبيولوجية Microbiological	3	
		Quality Control للجودة	נ	-
3	0605806	Applications of تطبيقات الطرق الطيفية		
		Advanced المتقدمة في ابحاث الكيمياء Spectroscopic		
		الصيدلية Spectroscopic	3	
		Methods in	3	
		Pharmaceutical		
		Chemistry Research		

وصف مقررات درجة دكتوراه الفلسفة في العلوم الصيدلية قسم الكيمياء التحليلية الصيدلية

First Semester (9 cr. h)

Course Name	Credit hours		Code No.
	L	P	
Quality Control of Pharmaceutical Products	2		0607801
الرقابة الدوائية للمستحضرات الصيدلية			

Description: The course provides postgraduates with basic and advanced knowledge in the area of quality control and validation of analytical methods. Topics covered in the course include validation of analytical methods according to different international recommended guidelines such as ICH, USP and FDA, cleaning validation and stability testing. Official physico-chemical tests and methods of analysis used to check quality (identity and purity) of bulk and finished pharmaceutical products will also be covered.

- Pharmaceutical Analysis and Quality Control
- King's College, London
- Link:
- https://www.kcl.ac.uk

Course Name	Credit hours		Code No.
	L	P	
Specialized Analytical Techniques	2		0607802
طرق التحليل المتخصصة			

Description: This course is concerned with specialized techniques of analysis used to solve problems and handle complex situations in various areas of applications as: clinical, environmental, toxicological, biomedical, clinical,..etc).

- Specialized analytical techniques
- Kingston University-London-UK
- Link: https://www.kingston.ac.uk/postgraduate-course/analytical-chemistry/

Second Semester (9 cr. h)

Course Name		lit hours	Code No.
	L	P	
Advanced Separations	3		0607804
الفصل المتقدم			

Description: This course will include: multidimensional separations, CE, advanced sample preparation techniques for complex matrices including environmental, forensic and biological samples, as well as analysis of drugs in presence of their degradation products and related substances. Lab-on-Chip analysis will also be covered.

- Advanced Separation Methods
- Stockholm University- Swedan
- Link:
- https://www.su.se/english/search-courses-and-programmes/ka7006-1.412372

Course Name	Credit hours		Code No.
	L	P	
Chemometric and Laboratory Intelligence	3		0607805
Methods			
الطرق القياسية الكيميائية وطرق الذكاء الاصطناعي			
المعملى			

Description: This course is concerned with the basic principles and applications of most common chemometric and laboratory intelligence methods including: multivariate methods which are divided to multiple linear regression methods as classical least squares, inverse least squares and Q- matrix; and factor- based methods as principal component regression and partial least squares. This course includes also the knowledge processing and soft computing as in artificial neural networks, fuzzy language and genetic algorithms.

- Analytical chemistry, chemometrics
- Stockholm University- Sweden
- Link:
- https://www.su.se/english/search-courses-and-programmes/ka7002-1.413064