

قائمة مقررات درجة الماجستير في العلوم الصيدلانية
قسم الكيمياء الصيدلانية

1-General :(0600700) (12 cr. h)

١. مقررات عامة:

Courses

2- Specialized : (12 cr. h)

٢. مقررات تخصصية:

Courses

First Semester (6 cr. h)

No.	Course code	Courses	Credit hours	
			L	P
1	0605701	Advanced Pharmaceutical Organic Chemistry الكيمياء العضوية الصيدلانية المتقدمة	3	--
2		Elective Course مقرر اختياري	3	
Total			6	

Second Semester (6 cr. h)

No.	Course code	Courses	Credit hours	
			L	P
3	0605702	Advanced Medicinal Chemistry الكيمياء الطبية المتقدمة	3	--
4	0605703	Drug Design تصميم الأدوية	3	--
Total			6	

Elective Courses

No.	Course code	Courses	Credit hours	
			L	P
1	0605704	Drug Synthesis تشبيد الأدوية	3	-
2	0605705	Drug Analysis تحليل الأدوية	3	-
3	0602703	Applied Experimental Pharmacology تطبيقات علم الأدوية التجريبي	2	1*

*1 credit hour practical is 2 hours session weekly

وصف مقررات درجة الماجستير في العلوم الصيدلانية
قسم الكيمياء الصيدلانية

First Semester (6 cr. h)

Course Name	Credit hours		Code No.
	L	P	
Advanced Pharmaceutical Organic Chemistry الكيمياء العضوية الصيدلانية المتقدمة	3	--	0605701
Description: This course provides basic knowledge about heterocyclic chemistry regarding; nomenclature, synthesis and reactivity of heteroaromatic compounds, applications of heterocyclic compounds. In addition, it deals with name reactions, pericyclic reactions, investigation of organic reaction mechanism, acidity and basicity concepts of organic compounds, protecting groups, hybridization and ring strains • Ohio State Univ. http://pharmacy.osu.edu/future-students/graduate-studies program			

Second Semester (6 cr. h)

Course Name	Credit hours		Code No.
	L	P	
Advanced Medicinal Chemistry الكيمياء الطبية المتقدمة	3	--	0605702
Description: The course delivers advanced study of selected classes of medicinal compounds with particular emphasis on biological activity, mechanism of action, biotransformation and structural and physical properties governing their fate in the biological system • Ohio State Univ. http://pharmacy.osu.edu/future-students/graduate-studies program.			

Course Name	Credit hours		Code No.
	L	P	
Drug Design تصميم الأدوية	3	--	0605703
Description: This course addresses the application of modern in silico tools and recent techniques in different phases of drug discovery and design of new drug candidates. The following concepts of drug design are discussed: molecular modeling, computer-aided drug design (CADD), structure-based drug design, ligand-based drug design, pharmacophore searching, molecular docking, quantitative structure activity relationship (QSAR), fragment-based lead discovery, drug-likeness metrics, pharmacokinetic and pharmacodynamic lead optimization strategies. • Ohio State Univ. http://pharmacy.osu.edu/future-students/graduate-studies program			

Elective Courses

Course Name	Credit hours		Code No.
	L	P	
Drug Synthesis تشبيد الأدوية	3	--	0605704
Description: This course deals with reactions and synthesis in medicinal chemistry. It covers the following topics: reagents in organic synthesis, synthesis of intermediates applicable in drug synthesis, synthesis of representative drugs, peptide synthesis, retro synthesis, rearrangements, techniques in pharmaceutical organic synthesis (e.g. purification and separation techniques). The course highlights some information about recent topics in pharmaceutical chemistry (e.g. solid-phase supported reagents). The course also includes stories from the medicinal industry and scalability problems, environmental considerations pertaining to the proposed synthetic procedures and green chemistry concepts. • Ohio State Univ. http://pharmacy.osu.edu/future-students/graduate-studies program			

Course Name	Credit hours		Code No.
	L	P	
Drug Analysis تحليل الأدوية	3	--	0605705
Description: This course illustrates the following topics: functional group-based analysis, chemical quality control of drugs, and impurity profiling of pharmaceutical compounds • Ohio State Univ. http://pharmacy.osu.edu/future-students/graduate-studies program			

