

CURRICULUM MAP
UCI Master of Science in Pharmacology (MSP)

		Applied Pharmacology	Principles of Pharmacology	Receptors and Drug Targets	Research Techniques in Pharmacology	Experimental Design and Data Analysis	Ethics in Scientific Research	Concepts in Drug Discovery	Special Topics in Pharmacology	Masters Project in Pharmacology	Neuropharmacology	Behavioral Pharmacology	Cardiovascular Pharmacology	Endocrine, Respiratory and GI Pharmacology
PLO	Upon satisfactory completion of the MSP, graduates will have the following competencies or learning outcomes of the program (PLOs). These students' competencies will be achieved through successfully accomplishing the learning objectives of the courses.	PHARM 270	PHARM 271	PHARM 272	PHARM 274	PHARM 276	PHARM 277	PHARM 278	PHARM 279	PHARM 280	PHARM 281	PHARM 282	PHARM 283	PHARM 284
1	Explain effectively the fundamental principles of pharmacology	I	I	IR	R				RM	M	R		R	R
2	Demonstrate subject mastery in molecular, cellular, and integrative aspects of systemic pharmacology			IR					R	RM	RM	RM	RM	RM
3	Discuss effectively major applications of fundamental knowledge of pharmacology in the pharmaceutical industries and clinical clinical therapy	I						RM		R	RM	R	RM	RM
4	Discuss current approaches to global drug discovery and related legislative regulations		I		R	R		IRM	R					
5	Apply fundamental scientific knowledge of pharmacology and problem solving strategies to develop innovative solutions specific problems in pharmacology		IR		R	M		R	R	RM		R		
6	Critically review, analyze, and interpret the literature relating to pharmacology research	I	IR		IR				R	M	R	R	R	R
7	Critically appraise sources of literature for validity and usefulness, identifying gaps in pharmacology knowledge	I	IR	IR		R		M	M	M	R	R	R	R
8	Formulate focused questions and generate hypotheses based on current pharmacology knowledge		I	I		R		RM		M				
9	Appraise experimental laboratory techniques and discuss the limitations of techniques and disease models used in drug research.	I			R	R	R	R		M				
10	Apply basic science knowledge and skills to experimental study design, management and data analysis and interpretation	I			R	R				RM	R	R	R	R
11	Use statistical appropriate reasoning and methods in research design, data analysis and problem solving in pharmacology research					IRM				RM				
12	Discuss the principles of scientific and professional ethics and standards of ethical conduct of research						IRM	R		R				
13	Demonstrate professionalism and high ethical standards in pharmacology research	I	R	R			RM	R		RM				
14	Demonstrate self-direction and originality in implementing a research project					R		R		M		R		
15	Function as an effective team leader and member on pharmacology projects		R	R	RM		R	R	R	R	R	R	R	R
16	Communicate science effectively with a variety of audiences using a range of techniques, defend research findings orally and in writing.	I	IR		M		M	R	R	R	R	R	R	R
17	Develop independent and autonomy in learning, managing requirements and undertaking research tasks with minimum guidance	I	R		IR		R	R	R	M	R	R	R	R
18	Demonstrate self-evaluation skills, reflecting on own and others' functioning	I	R	R	R		R	R	R	M	R	R	R	R

KEY: I = Introductory; R = Reinforced/Developed; M = Mastered/Assessed