

**Special Courses of Master Degree in Pharmaceutical  
Sciences**  
**Pharmacology and Toxicology Department**

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

**2- Specialized Courses: (12 cr. h)**

**First Semester (6 cr. h)**

No.	Course code	Courses	Credit hours	
			L	P
1	0602701	Advanced Pharmacotherapeutics I	3	--
2		Elective Course	3	--
<b>Total</b>			<b>6</b>	

**Second Semester (6 cr. h)**

No.	Course code	Courses	Credit hours	
			L	P
3	0602702	Advanced Topics in Pharmacology	3	--
4	0602703	Applied Experimental Pharmacology	2	1*
<b>Total</b>			<b>6</b>	

\*1 credit hour practical is 2 hours session weekly

**Elective Courses**

No.	Course code	Courses	Credit hours	
			L	P
1	0602704	Selected Topics in Physiology	3	--
2	0606704	Plant Tissue Culture	3	--

**Course Description of Master Degree in Pharmaceutical  
Sciences**  
**Pharmacology and Toxicology Department**

**First Semester (6 cr. h)**

Course Name	Credit hours		Code No.
	L	P	
<b>Advanced Pharmacotherapeutics I</b>	3	--	0602701
<p><b>Description:</b> The course discusses and explains the epidemiology, etiology, pathophysiology, signs and symptoms and interpretation of biochemical data leading to the diagnosis of selected cardiovascular, renal, respiratory, and gastrointestinal disorders. The pharmacological mechanisms governing the choices of treatment and their personalization that are applied in pharmacy practice setting are also discussed. Study in these areas provides the chance to experience cutting edge research and utilizing structured evidence-based medicine for providing appropriate treatment guidelines, formulate pharmaceutical care plan and monitoring patients on drug therapies, which are issues directly relevant to some of today's major challenges in healthcare.</p> <p>(Bench Mark: University of Bath- - Department of Pharmacy and Pharmacology – UK). (Bench Mark: University of Strathclyde - Institute of Pharmacy and Biomedical Sciences – UK)</p> <ul style="list-style-type: none"> <li>• <a href="https://www.postgrad.com/university-of-bath-pharmacy-and-pharmacology-pharmacy-and-pharmacology/course/">https://www.postgrad.com/university-of-bath-pharmacy-and-pharmacology-pharmacy-and-pharmacology/course/</a> <a href="https://www.strath.ac.uk/courses/postgraduate/taught/advancedclinicalpharmacypractice/">https://www.strath.ac.uk/courses/postgraduate/taught/advancedclinicalpharmacypractice/</a></li> </ul>			

**Second Semester (6 cr. h)**

Course Name	Credit hours		Code No.
	L	P	
<b>Advanced Topics in Pharmacology</b>	3	--	0602702
<p><b>Description:</b> drugs, their targets, their fate in human body and their clinical applications. The course will deliver deep insights on different important topics in pharmacology including cell signaling, cardiovascular pharmacology and neuropharmacology with special emphasis on neurodegeneration and psychopharmacology.</p> <p>(Bench Mark: Oxford University- Medical Sciences Division - Department of Pharmacology – UK).</p> <ul style="list-style-type: none"> <li>• <a href="https://www.ox.ac.uk/admissions/graduate/courses/msc-pharmacology?wssl=1">https://www.ox.ac.uk/admissions/graduate/courses/msc-pharmacology?wssl=1</a></li> </ul>			

Course Name	Teaching h/week		Credit hours	Code No.
	L	P		
<b>Applied Experimental Pharmacology</b>	2	2	3	0602703
<p><b>Description:</b> This course introduces the students to current advances in pharmacological research and drug screening during drug discovery. The course focuses on familiarizing students with practical skill such as handling of animals, routes of drug administration, establishment of animal disease models such as hypertension, gastrointestinal injury, hepatotoxicity, and nephrotoxicity as well as behavioral and pain models, and the use of these models for screening newly developed substances with potential therapeutic implications.</p> <p>(Bench Mark: University of Strathclyde - Institute of Pharmacy and Biomedical Sciences – UK).</p> <ul style="list-style-type: none"> <li>• <a href="https://www.postgrad.com/university-of-strathclyde-strathclyde-institute-of-pharmacy-biomedical-sciences-advanced-pharmacology/course/">https://www.postgrad.com/university-of-strathclyde-strathclyde-institute-of-pharmacy-biomedical-sciences-advanced-pharmacology/course/</a></li> </ul>				

### Elective Courses

Course Name	Credit hours		Code No.
	L	P	
<b>Selected Topics in Physiology</b>	3	--	0602704
<p><b>Description:</b> This course is designed to give students a broad understanding of normal human physiology including nervous system, cardiovascular, gastrointestinal, and renal physiology. In this course the candidate will get the chance to explore how humans' complex systems are built, work, and keep us alive. The course starts with detailed study of cells – the body's building blocks – and work towards organs and organ systems, as well as how everything works together as a unit and gets us through everyday life.</p> <p>(Bench Mark: University of Bolton – UK).</p> <ul style="list-style-type: none"> <li>• <a href="https://www.postgraduatesearch.com/university-of-bolton/57157606/postgraduate-course.htm">https://www.postgraduatesearch.com/university-of-bolton/57157606/postgraduate-course.htm</a></li> </ul>			