

**Ministry of Higher Education and Scientific Research  
Scientific Supervision and Evaluation Authority  
Department of Quality Assurance and Academic Accreditation**

***Academic program description forms for colleges and institutes***

**University:** Basrah


**College/Institute:** Pharmacy

**Academic Department:** Clinical Pharmacy

**File filling date:** 2021-2022

**Signature** 

**Department Head:**  
Dr. jubran khalil hassan

**Signature**   
**Vice Dean for Scientific Affairs:**  
Dr. Modher nejim abdullah

**File checked by:**

**Quality Assurance and University Performance Division**

**Director of the Quality Assurance and University Performance Division:**

  
Dr. Suha Shyal Abd AL-Hassan

**Date:**

**Signature:**



  
Dean's endorsement  
Dr. Falah Hassan Shari

Description of the academic program

This academic program description provides a brief summary of the most important characteristics of the program and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available opportunities. It is accompanied by a description of each course within the program.

<b>1.Educational institution</b>	<b>Ministry oh higher education and scientific research</b>
<b>2.Department</b>	<b>University of Basrah/ College of Pharmacy/ Clinical pharmacy department</b>
<b>3.Academic Program</b>	<b>BSc in pharmaceutical Sciences</b>
<b>4.Final degree</b>	<b>Bachelor's</b>
<b>5.Study system</b>	<b>Two sessions per a year</b>
<b>6. Accreditation Program</b>	<b>Under study</b>
<b>7.External effectors</b>	<b>Practical part</b>
<b>8.Date of preparing</b>	<b>2021-2022</b>
<b>9.Goals of Academic Program:</b>	
<b>The Program lasts for Three stages in Five sessions.....</b>	
<b>3<sup>rd</sup> stage:</b>	
<b>Session (2<sup>nd</sup>): Pharmaceutical Ethics: study the students the right ethics when dealing with patients, medical institutions or any part related to health, medical roles and laws.</b>	
<b>These actions rise from humanity and what the pharmacy means</b>	
<b>4<sup>th</sup> stage:</b>	
<b>Sessions (1<sup>st</sup> and 2<sup>nd</sup>): Clinical Pharmacy; by two parts theoretical and practical, try to teach how to reach the right diagnosis of simple cases (1<sup>st</sup> course) and cases that need hospital admission (2<sup>nd</sup> course), try to aid in prescribing the true medications, suitable dose, the best drug for that case, and to follow up the drug administration with the patient</b>	
<b>4<sup>th</sup> stage : Communication Skills</b>	
<b>In the 2<sup>nd</sup> session or course this object is taken. Through it the students are taught how to communicate with patients and other people in the health institutions, dealing with the right ways in solving problems</b>	
<b>5<sup>th</sup> stage:</b>	
<b>1<sup>st</sup> and 2<sup>nd</sup> course: Advance therapeutics: this object is considered extension for clinical pharmacy in 4<sup>th</sup> stage, but dealing deep in diseases according to systems ( etiology, pathogenesis, diagnosis, treatment and best therapy use)</b>	

**5<sup>th</sup> stage:**

**1<sup>st</sup> and 2<sup>nd</sup> course: Hospital training: this object the practical for applying the objects studied in advance therapeutics, in addition to new subjects regarding pediatrics, gynecology, surgery and internal medicine. These tours are done in departments of hospital**

**5<sup>th</sup> stage:**

**2<sup>nd</sup> course: pharmacoeconomics: studying the value of health services and drug treatment, choosing the suitable one with less economic value with best pharmacological results**

**5<sup>th</sup> stage:**

**2<sup>nd</sup> course: Therapeutic drug monitoring (TDM): here the students are taught how to calculate a specific dose for certain populations (renal failure, hepatic impairments), in addition to specific drug with special pharmaceutical properties. Calculate the drug concentration in blood in order to reach the desired therapeutic activity.**

<b>10. The output of academic program and ways of teaching and evaluating</b>
<b>a- the cognitive goals:</b>
<ol style="list-style-type: none"> <li>1. Define simple clinical cases that visit pharmacies and how to treat them</li> <li>2. Define the clinical cases in hospitals and how to deal with</li> <li>3. Define how to reach the desired therapeutic concentrations of drug</li> <li>4. Define the economic value for final product (drug or services) and how to reach the best results with minimum loss.</li> </ol>
<b>b- the skills goals:</b>
<ol style="list-style-type: none"> <li>1. gain skills in dealing with patients to reach the correct diagnosis and then the true therapy</li> <li>2. gain skills in knowing the different dosage forms and the desired use</li> <li>3. gain skills in drug marketing, that had an effect on global economic</li> </ol>
<b>Teaching methods</b>
<ol style="list-style-type: none"> <li>1. theoretical lectures</li> <li>2. training laboratories</li> <li>3. scientific researches</li> <li>4. seminars</li> </ol>
<b>Evaluating methods</b>
<ol style="list-style-type: none"> <li>1. exams (mid-term and final)</li> <li>2. weekly or daily quizzes (oral or written)</li> <li>3. home works</li> <li>4. graduate researches</li> </ol>
<b>c- educational goals</b>
<ol style="list-style-type: none"> <li>1. encourage the students to get more efficient in solving clinical cases</li> <li>2. increase readings of scientific researches</li> <li>3. being responsible due to dealing with patients life</li> </ol>
<b>Teaching methods</b>
<ol style="list-style-type: none"> <li>1. visiting the scientific locations (libraries, hospitals,...etc)</li> <li>2. home works</li> </ol>
<b>Evaluating methods</b>
Oral discussions, OSCE and written exams
<b>d- general skills for future</b>
<ol style="list-style-type: none"> <li>1. how to read prescriptions and discuss the items</li> <li>2. using computers and software programs</li> <li>3. how to present lectures and seminars</li> </ol>
<b>Teaching methods</b>
Using data shows, download videos

<b>Evaluating methods</b>				
<b>Oral discussions and written exams</b>				
<b>10. program design</b>				
<b>Stage</b>	<b>Name of objects</b>	<b>Weekly hours</b>		
		<b>Theoretical</b>	<b>Practical</b>	
<b>3rd</b>	<b>Pharmaceutical ethics / 2<sup>nd</sup> course</b>	<b>2</b>		
<b>4<sup>th</sup></b>	<b>Clinical pharmacy I/ 1<sup>st</sup> course</b>	<b>2</b>	<b>2</b>	
	<b>Clinical pharmacy II/ 2<sup>nd</sup> course</b>	<b>2</b>	<b>2</b>	
	<b>Communication skills/ 2<sup>nd</sup> course</b>	<b>2</b>		
<b>5<sup>th</sup></b>	<b>Hospital training</b>		<b>6</b>	
	<b>Advance therapeutics/ 1<sup>st</sup> course</b>	<b>3</b>		
	<b>Advance therapeutics/ 2<sup>nd</sup> course</b>	<b>2</b>		
	<b>TDM</b>	<b>2</b>	<b>2</b>	
	<b>Pharmacoeconomics/ 2<sup>nd</sup> course</b>	<b>2</b>		

<b>12. planning for future personality</b>
<b>Improve personality and vocational</b> <b>Improve communications</b> <b>Scientific analysis</b> <b>Scientific discussion</b>
<b>13. acceptance guide</b>
<b>Through central acceptance from ministry of higher education who had:</b> - graduate from high school (6 <sup>th</sup> secondary class) - 10% of the 1 <sup>st</sup> s of pharmacy institute - the 1 <sup>st</sup> student on first stage in science college (biology/chemistry)
<b>14. data source of this program</b>
<b>Books and researches</b>  <b>Clinical Pharmacy and therapeutics , by Walker</b> <b>Applied Therapeutics, the clinical use of drugs, by Koda Kimble</b> <b>British National Formulary</b> <b>Symptoms in the pharmacy, by Alison</b> <b>Community Pharmacy; symptoms, diagnosis and treatment</b> <b>Applied Clinical Pharmacokinetics, by Larry</b>

Schedule of course skills																		
Put (*) for each square in front of teaching out-put that follow the program evaluation																		
			Necessary Learning Out put															
Year/level	Name of object	Essential/ optional	Knowledge goals				Skills goals				Moral goals				General skills( related for employing and personal development)			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
3 <sup>rd</sup>	Pharmaceutical ethics	Essential	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4 <sup>th</sup>	-Clinical pharmacy  -communication skills	Essential	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5 <sup>th</sup>	-Advance therapeutics  -Therapeutic drug monitoring  -Pharmaco-economic  -Hospital training	Essential	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

### Model of Course Describing

Here, the summary for describing the most course characteristics and teaching outputs that suspected by the student to reach them, if he took the full advantages from available teaching chances.

<b>1. scientific institute</b>	<b>Ministry of higher education</b>
<b>2. department</b>	<b>Clinical pharmacy department/ college of pharmacy/ university of Basrah</b>
<b>3. Object name</b>	<b>Pharmaceutical Ethics Communication skills Clinical pharmacy Advance therapeutics I Hospital training Pharmacoeconomics Therapeutic drug monitoring</b>
<b>4. attendance</b>	<b>Theoretical lectures and scientific labs</b>
<b>5. section/year</b>	<b>1<sup>st</sup> and 2<sup>nd</sup> course of third, fourth, and fifth year</b>
<b>6. total hours</b>	
<b>7. date of organize this model</b>	<b>2021-2022</b>
<b>8. Course or Object Goals:</b>	
<ul style="list-style-type: none"> <li>- Study the students the right ethics when dealing with patients, medical institutions or any part related to health, medical roles and laws. These actions rise from humanity and what the pharmacy means</li> <li>- Try to teach how to reach the right diagnosis of simple cases (1<sup>st</sup> course) and cases that need hospital admission (2<sup>nd</sup> course), try to aid in prescribing the true medications, suitable dose, the best drug for that case, and to follow up the drug administration with the patient</li> <li>- The students are taught how to communicate with patients and other people in the health institutions, dealing with the right ways in solving problems</li> <li>- Dealing deep in diseases according to systems ( etiology, pathogenesis, diagnosis, treatment and best therapy use)</li> <li>- Practical applying the objects studied in advance therapeutics, in addition to new subjects regarding pediatrics, gynecology, surgery and internal medicine. These tours are done in departments of hospital</li> </ul>	



<p>- Studying the value of health services and drug treatment, choosing the suitable one with less economic value with best pharmacological results</p> <p>- How to calculate a specific dose for certain populations (renal failure, hepatic impairments), in addition to specific drug with special pharmaceutical properties. Calculate the drug concentration in blood in order to reach the desired therapeutic activity.</p>
<p><b>9.The output of academic program and ways of teaching and evaluating</b></p>
<p><b>a- the cognitive goals:</b></p> <ol style="list-style-type: none"> <li>1. define simple clinical cases that visit pharmacies and how to treat them</li> <li>2. define the clinical cases in hospitals and how to deal with</li> <li>3. define how to reach the desired therapeutic concentrations of drug</li> <li>4. define the economic value for final product (drug or services) and how to reach the best results with minimum loss.</li> </ol>
<p><b>b- the skills goals:</b></p> <ol style="list-style-type: none"> <li>1. gain skills in dealing with patients to reach the correct diagnosis and then the true therapy</li> <li>2. gain skills in knowing the different dosage forms and the desired use</li> <li>3. gain skills in drug marketing, that had an effect on global economic</li> </ol>
<p><b>Teaching methods</b></p>
<ol style="list-style-type: none"> <li>1. theoretical lectures</li> <li>2. training laboratories</li> <li>3. scientific researches</li> <li>4. seminars</li> </ol>
<p><b>Evaluating methods</b></p>
<ol style="list-style-type: none"> <li>1. exams (mid-term and final)</li> <li>2. weekly or daily quizzes (oral or written)</li> <li>3. home works</li> <li>4. graduate researches</li> </ol>
<p><b>c- educational goals</b></p>
<ol style="list-style-type: none"> <li>1. encourage the students to get more efficient in solving clinical cases</li> <li>2. increase readings of scientific researches</li> <li>3. being responsible due to dealing with patients life</li> </ol>
<p><b>Teaching methods</b></p>
<ol style="list-style-type: none"> <li>1. visiting the scientific locations (libraries, hospitals,...etc)</li> <li>2. home works</li> </ol>
<p><b>Evaluating methods</b></p>
<p><b>Oral discussions, OSCE and written exams</b></p>

<b>d- general skills for future</b>
<b>1. how to read prescriptions and discuss the items</b> <b>2. using computers and software programs</b> <b>3. how to present lectures and seminars</b>

<b>10. Course design:</b>				
<b>hours</b>	<b>objects</b>	<b>Name of object</b>	<b>Teaching method</b>	<b>Evaluating method</b>
<b>2/ theoretical</b>	<b>Pharmaceutical ethics</b>	<b>Pharmaceutical ethics</b>	<b>lectures</b>	<b>Exams and quizzes</b>
<b>2/theoretical</b> <b>2/ practical</b>	<b>Diagnose disorders and treat them</b>	<b>Clinical pharmacy</b>	<b>Lectures</b>	<b>Exams and quizzes</b>
<b>2/ theoretical</b>	<b>Principles of communications</b>	<b>communication skills</b>	<b>Lectures</b>	<b>Exams and quizzes</b>
<b>3/ theoretical</b>	<b>Study diseases and their treatment</b>	<b>Advance therapeutics</b>	<b>Lectures</b>	<b>Exams and quizzes</b>
<b>4/ practical</b>	<b>Practical apply of clinical cases</b>	<b>Hospital training</b>	<b>Lectures</b>	<b>Exams and quizzes</b>
<b>2/ theoretical</b>	<b>Drug and medical services economy</b>	<b>pharmacoeconomics</b>	<b>Lectures</b>	<b>Exams and quizzes</b>
<b>2/theoretical</b> <b>2/practical</b>	<b>pharmacokinetics</b>	<b>Therapeutic drug monitoring</b>	<b>Lectures</b>	<b>Exams and quizzes</b>

<b>11. plan for developing academic course</b>
<b>Review of course details completely after two years of course organization for updating every new pharmaceutical facts</b>

<b>12. the infrastructures</b>	
<b>1. books</b>	<b>Clinical Pharmacy and therapeutics , by Walker</b> <b>Applied Therapeutics, the clinical use of drugs, by Koda Kimble</b> <b>Symptoms in the pharmacy, by Alison</b> <b>Community Pharmacy; symptoms, diagnosis and treatment</b> <b>Applied Clinical Pharmacokinetics, by Larry</b>
<b>2. references</b>	<b>British National Formularly</b> <b>Pharmacotherapy</b>
<b>3. net webs</b>	<a href="https://www.scholar.google.com">https://www.scholar.google.com</a> <a href="https://www.sciencedirect.com">https://www.sciencedirect.com</a>