



## COURSE SPECIFICATION

### Faculty of Medicine- Mansoura University

#### (A) Administrative information

(1) Programme offering the course.	Ph.D degree of clinical pharmacology
(2) Department offering the programme.	Clinical pharmacology department
(3) Department responsible for teaching the course.	Clinical pharmacology department
(4) Part of the programme.	First part
(5) Date of approval by the Department's council	10/7/2016
(6) Date of last approval of programme specification by Faculty council	9-8-2016
(7) Course title.	Bioassay
(8) Course code.	CPHARM 606 BA
(9) Total teaching hours.	15
(10) Credit hours.	1

## **(B) Professional information**

### **(1) Course Aims.**

The broad aims of the course are.

- 1- Acquire knowledge related to drug screening and bioassay of , to enhance future drug development and clinical trials.

### **(2) Intended Learning Outcomes (ILOs):**

On successful completion of the course, the candidate will be able to:

#### **A- Knowledge and Understanding**

1. Summarize how to screen for agonist and antagonist activity of drugs.
2. Name physiological salt solutions, units, levers and methods of collection of blood samples
3. Describe Screening methods for serotonergic, histaminic & antihistaminic activity.
4. Study experimental models for Screening of analgesic, anti-inflammatory, antidepressant, anticonvulsant, anti-parkinsonian, anti-alzheimer activity and local anesthetic drugs.
5. Outline experimental models for Screening of anti-diabetic, anti-hypertensive and antitumor activity.
6. Discuss acute and chronic toxicity studies in animals.

## B- Intellectual skills

1. Evaluate early phase studies of drug action in animals.

### (3) Course content.

Topics	Lectures	Laboratory
Types, methods and conditions of bioassay (Biological variability)	1	-
Animal toxicity assay.	1	-
Physiological salt solutions, units, levers. Standard techniques of drug injection and collection blood samples.	1	-
Bioassay of agonists and antagonists	1	-
Screening for drugs treating peptic ulcer	1	-
Screening for histamine & antihistaminics	1	-
Screening for analgesics and anti-inflammatory	1	-
Screening for antidepressants	1	-
Screening for serotonin & antipsychotics	1	-
Screening for anticonvulsants & antiparkinsonins	1	-
Screening for local anesthetics	1	-

Screening for antialzheimer	1	-
Screening for antidiabetics	1	-
Screening for Diuretics & antihypertensive	1	-
Screening for chemotherapy	1	-
<b>Total teaching hours:</b>	<b>15</b>	<b>-</b>

**(4) Teaching methods.**

4.1: Lectures.

**(5) Assessment methods.**

5.1: - **Written exam** for assessment of knowledge & intellectual ILOs.

5.2: - **MCQ exam** at the end at the semester for assessment of knowledge & intellectual ILOs

Assessment schedule.

الدرجة نظري	الاختبار		المقرر
١٠٠	٨٠	اختبار تحريري مدته ثلاث ساعات	المعايير الحيوية
	٢٠	اختبار MCQ	

**(6) References of the course.**

6.1: Text books:

Experimental pharmacology and therapeutics.

6.2: Journals.

Pharmacological reviews, ..... etc

**(7) Facilities and resources mandatory for course completion.**

- Computer labs with open access to medical research databases
- Upgraded library

- Induction course introducing study skills.
- Candidate's logbook.
- Internet with a wide range of learning support material.

**Course coordinators:**

- Prof. Dr. Hussein Mahmoud El Beltagy
- Prof. Ali Gaballa
- Prof. Dr. Mohamed-Hesham Daba
- lecturer. Mohamed abo el kheir
- Assistant lecturer. Hanan Eisa

**Head of the department:**

**Prof. Dr. Hussein Mahmoud El Beltagy**