University : Mansoura University

Faculty : Faculty of Pharmacy

Department :

1- Course data :-

Code:	PH416					
Course title:	Pharmacology (3)					
Level:	Four					
Program Title:	• pharmaceutical sciences					
Specialization:	Major					
Teaching Hours:	**Theoretical:**	2	**Tutorial:**		**Practical:**	1

2- Course aims :-

1. On completion of the course, the student will be able to describe mechanism of action, biological effects, and therapeutic applications of CNS-acting agents, anti-inflammatory agents, immunomodulating agents, and hormonal agents.

3- Intended learning outcomes of course (ILO'S) :-

a- Knowledge and understanding

1. [a12] Define the principles of body function in health and diseases states; as well as the etiology, epidemiology, laboratory diagnosis, clinical features of different diseases; and their pharmacotherapeutic approaches.
2. [a14] Classify the pharmacological properties of drugs including mechanism of action, therapeutic uses, dosage, contraindications, adverse drug reactions and drug interactions.

b- Intellectual skills

1. [b9] Apply the pharmacotherapeutic principles in the proper selection and use of drugs from synthestic and natural origin in various disease conditions.
2. [b11] Assess possible drug interactions, adverse drug reactions, pharmacovigilance and other drug-related problems, as essential issues in implementing pharmaceutical care.

c- Professional and practical skills

1. [c1] Utilize the proper pharmaceutical and medical terminology, to communicate with other health care professionals.
2. [c9] Persuade public awareness on rational use of drugs and social health hazards of drug abuse and misuse.
3. [c10] Counsel patients when dispensing OTC and prescription drugs and herbal formulations to ensure safe and proper use of medicines.
4. [c13] Assess risks concerning drug-drug interaction, adverse reaction and incompatibilities in different pharmaceutical preparations.

d- General and transferable skills

1. [d1] Communicate clearly by verbal and written means with patients and other health care professionals.
2. [d2] Retrieve and critically evaluate pharmaceutical information and clinical laboratory data from different sources to improve professional competencies.
3. [d3] Interact effectively in team working.
4. [d5] Practice independent learning needed for continuous professional development.

4- Course contents :-

No	Topics	Week
1	Introduction to CNS-acting drugs Introduction to hormonal agents	1
2	Anxiolytic, Sedative -Hypnotic Drugs Hypothalamic and Pituitary Drugs	1
3	Anxiolytic, Sedative -Hypnotic Drugs Thyroid Drugs	1
4	Antipsychotic Drugs & Adrenal Steroids and Related Drugs	1

5	Anti-parkinsonian Drugs & Adrenal Steroids and Related Drugs	1
6	Drugs for Alzheimer's Disease Drugs for Multiple Sclerosis Drugs affecting fertility and reproduction	1
7	Opioid analgesics & Drugs for Diabetes Mellitus	1
8	NSAIDs & Drugs for Diabetes Mellitus	1
9	Antiepileptic drugs & Drugs Affecting Calcium and Bone	1
10	Antidepressant drugs; Antimanic drugs & Immunosuppressants	1
11	CNS stimulants Immunostimulants	1
12	Hypnotics	1
13	Metastatic prostate cancer case study	1
14	Antiparkinsonism drugs	1
15	Cushing disease case study	1
16	Antiepileptic drugs	1
17	Hypothyroidism case study	1
18	Analgesics	1
19	Type I diabetes mellitus case study	1
20	CNS Stimulants	1
21	Infertility case study	1
22	Osteoporosis case study	1

5- Teaching and learning methods :-

S	Method	Knowledge and understanding	Intellectual skills	Professional skills	General skills
1	black board and datashow	a12,a14	b9,b11		d2,d3
2	case study group	a12,a14	b9,b11	c1,c9,c10	d1,d3
3	practical experiment	a12,a14	b9,b11	c1,c10,c13	d1,d3,d5

6- Teaching and learning methods of disables :-

1. Not found

7- Student assessment :-

a- Student assessment methods

No	Assessment Method	Knowledge and understanding	Intellectual skills	Professional skills	General skills
1	theoretical exam	a12,a14	b9,b11		d1,d3
2	practical exam	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5

3	oral exam	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5

b- Assessment schedule

No	Method	Week
1	theoretical exam	15
2	practical exam	14
3	oral exam	15
4	midterm	7

c- Weighting of assessments

No	Method	Weight
1	theoretical exam may be online	50
2	practical exam	25
3	oral exam	15
4	midterm	10
Total		100%

8- List of references

S	Item	Type
1	Tutorial staff members course notes	Course notes
2	Lippincott's Pharmacology; illustrated rteview 6th edition	Books
3	Basic and Clinical Pharmacology; Bertram Katzung, 9th edition	Books
4	websites	Web sites

9- Matrix of knowledge and skills of the course

S	Course contents	Knowledge and understanding	Intellectual skills	Professional skills	General skills
1	Introduction to CNS-acting drugs Introduction to hormonal agents	a12,a14	b9,b11		d1,d5
2	Anxiolytic, Sedative - Hypnotic Drugs Hypothalamic and Pituitary Drugs	a12,a14	b9,b11		d1,d5
3	Anxiolytic, Sedative - Hypnotic Drugs Thyroid Drugs	a12,a14	b9,b11		d1,d5

4	Antipsychotic Drugs & Adrenal Steroids and Related Drugs	a12,a14	b9,b11		d1,d5
5	Anti-parkinsonian Drugs & Adrenal Steroids and Related Drugs	a12,a14	b9,b11		d2,d3
6	Drugs for Alzheimer's Disease Drugs for Multiple Sclerosis Drugs affecting fertility and reproduction	a12,a14	b9,b11		d1,d2
7	Opioid analgesics & Drugs for Diabetes Mellitus	a12,a14	b9,b11		d1,d2
8	NSAIDs & Drugs for Diabetes Mellitus	a12,a14	b9,b11		d1,d3
9	Antiepileptic drugs & Drugs Affecting Calcium and Bone	a12,a14	b9,b11		d1,d3
10	Antidepressant drugs; Antimanic drugs & Immunosuppressants	a12,a14	b9,b11		d1,d3
11	CNS stimulants Immunostimulants	a12,a14	b9,b11		d1,d2,d3,d5
12	Hypnotics	a12,a14	b9,b11	c1,c9,c10	d1,d2,d3,d5
13	Metastatic prostate cancer case study	a12,a14	b9,b11	c1,c10,c13	d1,d2,d3,d5
14	Antiparkinsonism drugs	a12,a14	b9,b11	c1,c10,c13	d1,d2,d3,d5
15	Cushing disease case study	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5
16	Antiepileptic drugs	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5
17	Hypothyroidism case study	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5
18	Analgesics	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5
19	Type I diabetes mellitus case study	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5
20	CNS Stimulants	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5
21	Infertility case study	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5

22	Osteoporosis case study	a12,a14	b9,b11	c1,c9,c10,c13	d1,d2,d3,d5

Course Coordinator(s): -

1. Ghada Mohamed Sedek Bostan

Head of department: -

Ghada Mohamed Sedek Bostan