University : Mansoura University

Faculty : Faculty of Pharmacy

Department :

1- Course data :-

Code:	PDE 12					
Course title:	التهديف الدوائى					
Level:	Five					
Program Title:	• pharmaceutical sciences					
Specialization:	Major					
Teaching Hours:	**Theoretical:**	2	**Tutorial:**		**Practical:**	

2- Course aims :-

1. At the end of this course the students should recognise the main drug targets, know its structure, types and mechanism of action. uses these information in drug design.

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

a- Knowledge and understanding

1. [a5] Identify the structure-activity relationship of group of pharmaceutical compounds.
    - a5.1-Determine the relationship between the chemical structure of biologically active compounds and its biological activities

b- Intellectual skills

1. [b16] Predict the physical and chemical properties and biological activity of natural and synthetic compounds based on molecular structure.

- b16.1-Investigate the different properties and biological activity of the tested compounds according to its molecular structure.

c- Professional and practical skills

1. [c5] Perform good pharmacy practice by proper understanding of etiology and pathophysiology of diseases, and drug chemistry.
   - c5.1-illustrate the causes of some diseases and the target responsible of this defect and its relation with drug chemistry
2. [c19] Recognize the basic concepts of drug design, development and targeting.
   - c19.1-Identify the main strategies used in drug design of new biologically active compounds

d- General and transferable skills

1. [d8] Present information clearly in written, electronic and oral forms.
   - d8.1-Communicate clearly in written, electronic and oral forms
2. [d9] Promote critical thinking, problem-solving, decision-making, and time managing capabilities.
   - d9.1-Demonstrate critical thinking, problem-solving, decision-making, and time managing capabilities.

4- Course contents :-

No	Topics	Week
1	Protein structure and function	2
2	Enzyme structure and function	2
3	Enzymes as drug targets	2
4	Receptor structure and function	2
5	Receptor as drug targets	2
6	Design of agonist and antagonist	1
7	Nucleic acid as drug targets	2

5- Teaching and learning methods :-

S	Method	Knowledge and understanding	Intellectual skills	Professional skills	General skills
1	Lectures using white board , data show and power point presentations	a5.1	b16.1	c5.1,c19.1	d8.1,d9.1

6- Teaching and learning methods of disables :-

1. no

7- Student assessment :-

a- Student assessment methods

No	Assessment Method	Knowledge and understanding	Intellectual skills	Professional skills	General skills
1	written exam	a5.1	b16.1	c5.1,c19.1	d8.1,d9.1
2	Oral exam	a5.1	b16.1		d8.1,d9.1

b- Assessment schedule

No	Method	Week
1	Mid-term exam	7
2	Written exam	15
3	Oral exam	15

c- Weighting of assessments

No	Method	Weight
1	Mid-term exam	10
2	Written exam	75
3	Oral exam	15
Total		100%

8- List of references

S	Item	Type
1	An Introduction to Medicinal Chemistry, Fifth Edition- Graham L. Patrick Oxford University press 2013	Books

9- Matrix of knowledge and skills of the course

S	Course contents	Knowledge and understanding	Intellectual skills	Professional skills	General skills
1	Protein structure and function	a5.1	b16.1	c5.1,c19.1	d8.1
2	Enzyme structure and function	a5.1	b16.1	c5.1,c19.1	d9.1
3	Enzymes as drug targets	a5.1	b16.1	c5.1,c19.1	d8.1
4	Receptor structure and function	a5.1	b16.1	c5.1,c19.1	d8.1
5	Receptor as drug targets	a5.1	b16.1	c5.1,c19.1	d8.1,d9.1
6	Design of agonist and antagonist	a5.1	b16.1	c5.1,c19.1	d8.1,d9.1
7	Nucleic acid as drug targets	a5.1	b16.1	c5.1,c19.1	d8.1

Course Coordinator(s): -

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