



Department of Medicinal Chemistry



Program: PhD in Pharmaceutical Sciences
(*Medicinal Chemistry*)

Course: Advanced Trends in medicinal chemistry
Code: (PDP302)

Academic year: 2020/2021
first Semester

البرنامج

دكتور الفلسفة

رئيس القسم

أ.د. محمد أحمد أحمد مصطفى

تقرير مقرر

Advanced trends in medicinal
chemistry

منسق المقرر

أ.د. إحصان أحمد أبو الذهب

University: Mansoura

Faculty: Pharmacy

Department: Medicinal Chemistry

A. Basic Information

Course Title and code:	Advanced trends in medicinal chemistry(PDP302)
Program on which this course is given:	Ph. D
Total Credit hours:	2
Lectures: 2Tutorial/Practical:	
Academic Level	Postgraduate
Academic year	2020/2021 - first semester
Name of lecturers contributed to the delivery of this course	1. Prof. Dr. Ihsan A. Shehata 2.Dr. Mariam Atef Ghaly
Course co-coordinator:	Prof. Dr. Ihsan A. Shehata
External evaluator:	Prof.dr/ Mohammed Baraka
Date of Department Council Approval	10/5/2022
Date of Faculty Council Approval	.../5/2022

B. Statistical Information:

No. of students attending the course:	6			
No. of students completing the course:	6			
Exam Results				
Passed No.:	6 percentage: 100%			
Failed No.:	0 percentage: 0%			
Grading of successful students (%) :				
A+	100	A	A-	
B+		B	B-	
C+		C	C-	
D+		D	D-	



C. Professional Information:

1. Course teaching:

No.	Topics actually taught
1.	• Drug-like properties: Concepts, Structure and Methods.
2.	• Advantages of Good Drug-like Properties
3.	Important concepts:
4.	• Physicochemical properties. • Permeability structure modification strategies.
5.	• Disposition, Metabolism, and Safety.
6.	• Transporters
7.	• BBB and Structure–BBB Penetration Relationships.
8.	• Metabolic Stability
9.	• Plasma Protein Binding.
10.	• Toxicity.
11.	• Lead-like Compounds.
12.	• Strategies for Integrating Drug-like Properties into Drug Discovery

Topics taught as a percentage of the content specified:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

Lecturers commitment of the course content:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

Coverage of exam topics to course content:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

2. Used teaching and Learning Methods:

Lectures:	√
Practical Training/ Laboratory:	-
Seminar / Work shop:	√
Class Activity:	√
Case Study:	-
Other assignments / home work:	√



3. Student Assessment:

a. Method of Assessment	Percentage of total
Written examination	90
Oral examination	10
Practical / laboratory work	-
Semester Work	-

b. Members of examination committee:

1. Prof. Dr. Ihsan A. Shehata
2. Dr. Mariam Atef Ghaly

c. Role of external evaluator (If any):

1. Revision of course contents, and suggest new topics.
2. Revision of teaching and learning strategy.
3. Suggest enhancement plan for course notes
4. Revision of Exam and related assignments

4. Facilities and Teaching Materials

Totally adequate	√
Adequate to some extent	
Inadequate	
List any inadequacies:	

5. Administrative constraints

List any difficulties encountered:

-

6. Student evaluation of the course:

List any criticisms and response of course team

criticisms	response of course team
--	



7. Comments from external evaluator(s) (if exists) and response of course team:

Comment	Response

8. Course enhancement suggestions:

Progress on actions identified in the previous year's action plan:

Action	Completed	Not completed	Why not completed?
Upgrading teaching strategy in seminar sessions from drawing and illustration to presentations	√		

9. Action plan for academic year 2021 - 2022:

Action Required	Person responsible	Completion Date
Enhance self-learning abilities of the students.	Course lecturers	2021

	Name	Signature
Course Coordinator	Prof. Dr. Ihsan A. Shehata	
Head of Department	Prof. Dr. Mohamed Moustafa	



Department of Medicinal Chemistry



Program: PhD in Pharmaceutical Sciences
(*Medicinal Chemistry*)

Course: Molecular Modeling
Code: (PDP304)

Academic year: 2020/2021
Second Semester

البرنامج

دكتور الفلسفة

رئيس القسم

أ.د. محمد أحمد أحمد مصطفى

تقرير مقرر

Molecular Modeling

منسق المقرر

د. أحمد أبو بكر



University: Mansoura

Faculty: Pharmacy

Department: Medicinal Chemistry

A. Basic Information

Course Title and code:	Molecular Modeling(PDP304)
Program on which this course is given:	Ph. D
Total Credit hours:	2
Lectures: 2Tutorial/Practical:	
Academic Level	Postgraduate
Academic year	2020 /2021- second semester
Name of lecturers contributed to the delivery of this course	Dr. Ahmed Helmy Dr. Ahmed Abo Bakr
Course co-coordinator:	Dr. Ahmed Abo Bakr
External evaluator:	Prof Dr. Mohammed Baraka
Date of Department Council Approval	10/5/2022
Date of Faculty Council Approval	.../5/2022

B. Statistical Information:

No. of students attending the course: 6					
No. of students completing the course: 5					
Exam Results					
Passed No.: 5		percentage: 100%			
Failed No.: 0		percentage: 0%			
Grading of successful students (%) :					
A+	60	A	40	A-	
B+		B		B-	
C+		C		C-	
D+		D		D-	

C. Professional Information:

1. Course teaching:

Week No	Topics Actually taught
1. 2.	Introduction: Molecular and quantum mechanics
3. 4.	Important concepts: Drawing chemical structures Energy minimization Viewing 3D molecules Molecular dimensions Molecular properties
5. 6. 7. 8. 9.	Conformational analysis <ul style="list-style-type: none"> Local and global energy minima Molecular dynamics Stepwise bond rotation Structures by molecular dynamics Monte Carlo and the Metropolis method Genetic and evolutionary algorithms
10. 11. 12.	Structure comparisons and overlays <ul style="list-style-type: none"> Identifying the active conformation Comparison of rigid and non-rigid ligands 3D pharmacophore identification
13.	Final written & oral exam

Topics taught as a percentage of the content specified:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

Lecturers commitment of the course content:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

Coverage of exam topics to course content:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

2. Used teaching and Learning Methods:

Lectures:	√
Practical Training/ Laboratory:	-
Seminar / Work shop:	√



Class Activity:	√
Case Study:	-
Other assignments / home work:	√

3. Student Assessment:

a. Method of Assessment	Percentage of total
Written examination	90
Oral examination	10
Practical / laboratory work	-
Semester Work	-

b. Members of examination committee:

Dr. Ahmed Helmy
Dr. Ahmed Abo Bakr

c. Role of external evaluator (If any):

1. Revision of course contents, and suggest new topics.
2. Revision of teaching and learning strategy.
3. Suggest enhancement plan for course notes
4. Revision of Exam and related assignments

4. Facilities and Teaching Materials

Totally adequate	√
Adequate to some extent	
Inadequate	
List any inadequacies:	

5. Administrative constraints

List any difficulties encountered:
-



6. Student evaluation of the course:

List any criticisms and response of course team

criticisms	response of course team
--	

7. Comments from external evaluator(s) (if exists) and response of course team:

Comment	Response

8. Course enhancement suggestions:

Progress on actions identified in the previous year's action plan:

Action	Completed	Not completed	Why not completed?
Upgrading teaching strategy in seminar sessions from drawing and illustration to presentations	√		

9. Action plan for academic year 2021 - 2022:

Action Required	Person responsible	Completion Date
Enhance self-learning abilities of the students.	Course lecturers	2021

	Name	Signature
Course Coordinator	Dr. Ahmed Abo Bakr	
Head of Department	Prof. Dr. Mohamed Moustafa	



Department of Medicinal Chemistry



Program: PhD in Pharmaceutical Sciences
(*Medicinal Chemistry*)

Course: Pharmacodynamics
Code: (PDP301)

Academic year: 2020/2021
first Semester

البرنامج

دكتور الفلسفة

رئيس القسم

أ.د. محمد أحمد أحمد مصطفى

تقرير مقرر

Pharmacodynamic

منسق المقرر

أ.د. حسين إبراهيم الصباغ

University: Mansoura

Faculty: Pharmacy

Department: Medicinal Chemistry

A. Basic Information

Course Title and code:	Drug Pharmacodynamic(PDP301)
Program on which this course is given:	Ph. D
Total Credit hours:	2
Lectures: 2	Tutorial/Practical:
Academic Level	Postgraduate
Academic year	2020/2021 - first semester
Name of lecturers contributed to the delivery of this course	1. Prof. Dr. Hussein Ibrahim El-Subbagh 2. Prof. Dr. Nadia Sabry El-Gohary
Course co-coordinator:	Prof. Dr. Hussein Ibrahim El-Subbagh
External evaluator:	Prof. Dr. Mohammed Baraka
Date of Department Council Approval	10/5/2022
Date of Faculty Council Approval	.../5/2022

B. Statistical Information:

No. of students attending the course: 7					
No. of students completing the course: 7					
<u>Exam Results</u>					
Passed No.: 6		percentage: 85.72%			
Failed No.: 1		percentage: 14.28%			
Grading of successful students (%) :					
A+	85.72	A		A-	
B+		B		B-	
C+		C		C-	
D+		D		D-	



C. Professional Information:

1. Course teaching:

No.	Topics actually taught
1.	Introduction to drug metabolism
2.	Phase I reactions: Oxidation reactions, Reduction reactions
3.	Phase I reactions: Hydrolysis reactions.
4.	Phase II reactions: conjugation reactions
5.	Factors affecting drug metabolism

Topics taught as a percentage of the content specified:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

Lecturers commitment of the course content:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

Coverage of exam topics to course content:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

2. Used teaching and Learning Methods:

Lectures:	√
Practical Training/ Laboratory:	-
Seminar / Work shop:	√
Class Activity:	√
Case Study:	-
Other assignments / home work:	√

3. Student Assessment:

a. Method of Assessment	Percentage of total
Written examination	90
Oral examination	10
Practical / laboratory work	-
Semester Work	-



b. Members of examination committee:

- 1.Prof. Dr. Hussein Ibrahim El-Subbagh
- 2.Prof. Dr. Nadia Sabry El-Gohary

c. Role of external evaluator (If any):

1. Revision of course contents, and suggest new topics.
2. Revision of teaching and learning strategy.
3. Suggest enhancement plan for course notes
4. Revision of Exam and related assignments

4. Facilities and Teaching Materials

Totally adequate	√
Adequate to some extent	
Inadequate	
List any inadequacies:	

5. Administrative constraints

List any difficulties encountered:

-

6. Student evaluation of the course:

List any criticisms and response of course team

criticisms	response of course team
--	

7. Comments from external evaluator(s) (if exists) and response of course team:

Comment	Response



8. Course enhancement suggestions:

Progress on actions identified in the previous year's action plan:

Action	Completed	Not completed	Why not completed?
Upgrading teaching strategy in seminar sessions from drawing and illustration to presentations	√		

9. Action plan for academic year 2021 - 2022:

Action Required	Person responsible	Completion Date
Enhance self-learning abilities of the students.	Course lecturers	2021

	Name	Signature
Course Coordinator	Prof. Dr. Hussein Ibrahim El-Subbagh	
Head of Department	Prof. Dr. Mohamed Moustafa	



Department of Medicinal Chemistry



Program: PhD in Pharmaceutical Sciences
(*Medicinal Chemistry*)

Course: Therapeutic Drug Monitoring
Code: (PDP303)

Academic year: 2020/2021
Second Semester

البرنامج

دكتور الفلسفة

رئيس القسم

أ.د. محمد أحمد أحمد مصطفى

تقرير مقرر

Therapeutic Drug Monitoring

منسق المقرر

د.سلوان محمود حسب السيد



University: Mansoura

Faculty: Pharmacy

Department: Medicinal Chemistry

A. Basic Information

Course Title and code:	Therapeutic Drug Monitoring(PDP303)
Program on which this course is given:	Ph. D
Total Credit hours:	2
Lectures: 2Tutorial/Practical:	
Academic Level	Postgraduate
Academic year	2020/2021 - second semester
Name of lecturers contributed to the delivery of this course	1. Prof. Dr. Ali A. El-Emam 2. Dr. Selwan Mahmoud
Course co-coordinator:	Dr. Selwan Mahmoud
External evaluator:	Prof.dr/ Mohammed Baraka
Date of Department Council Approval	10/5/2022
Date of Faculty Council Approval	.../5/2022

B. Statistical Information:

No. of students attending the course: 5					
No. of students completing the course: 5					
Exam Results					
Passed No.: 5		percentage: 100%			
Failed No.: 0		percentage: 0%			
Grading of successful students (%) :					
A+	80	A	20	A-	
B+		B		B-	
C+		C		C-	
D+		D		D-	

C. Professional Information:

1. Course teaching:

No.	Topics actually taught
1.	Introduction: role of clinical pharmacy and pharmacist in TDM
2.	Important concepts: <ul style="list-style-type: none"> • pharmacokinetics, distributional phase of the drug, steady state and peak, trough sampling times pharmacodynamics, • bioavailability, protein binding biopharmaceutics.
3.	bioequivalence, drug metabolism and elimination.
4.	Bioanalysis, estimation of drugs in biological fluids
5.	Factors may affect therapeutic drug monitoring
6.	Application of different analytical methods for TDM of drugs as antibiotics, anticonvulsant, immunosuppressant

Topics taught as a percentage of the content specified:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

Lecturers commitment of the course content:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

Coverage of exam topics to course content:

√ > 90 %	70 - 90 %	< 70 %
----------	-----------	--------

2. Used teaching and Learning Methods:

Lectures:	√
Practical Training/ Laboratory:	-
Seminar / Work shop:	√
Class Activity:	√
Case Study:	-
Other assignments / home work:	√

3. Student Assessment:

a. Method of Assessment	Percentage of total
Written examination	90
Oral examination	10



Practical / laboratory work	-
Semester Work	-

b. Members of examination committee:

1. Prof. Dr. Ali A. El-Emam
2. Dr. Selwan Mahmoud

c. Role of external evaluator (If any):

1. Revision of course contents, and suggest new topics.
2. Revision of teaching and learning strategy.
3. Suggest enhancement plan for course notes
4. Revision of Exam and related assignments

4. Facilities and Teaching Materials

Totally adequate	√
Adequate to some extent	
Inadequate	
List any inadequacies:	

5. Administrative constraints

List any difficulties encountered:

-

6. Student evaluation of the course:

List any criticisms and response of course team

criticisms	response of course team
--	

7. Comments from external evaluator(s) (if exists) and response of course team:

Comment	Response



8. Course enhancement suggestions:

Progress on actions identified in the previous year's action plan:

Action	Completed	Not completed	Why not completed?
Upgrading teaching strategy in seminar sessions from drawing and illustration to presentations	√		

9. Action plan for academic year 2021 - 2022:

Action Required	Person responsible	Completion Date
Enhance self-learning abilities of the students.	Course lecturers	2021

	Name	Signature
Course Coordinator	Dr. Selwan Mahmoud	
Head of Department	Prof. Dr. Mohamed Moustafa	