Program: PhD in Pharmaceutical Sciences (*Pharmacognosy*)

Program Report

Academic Year: 2020/2021

رئيس القسم
أ.د/مني جودة محمد زغلول

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
PhD Program Report
2020/2021
Postgraduate Studies

A-Basic Information

1.	**Faculty**	Pharmacy
2.	**Program Title:**	PhD in Pharmaceutical Sciences (***Pharmacognosy***)
3.	**Program Type:**	Graduate
4.	**Department responsible:**	***Pharmacognosy***
5.	**Final award of the Program:**	PhD degree of Pharmaceutical Sciences (***Pharmacognosy)***
7.	**External Evaluator(s):**	Prof. Dr. Maged Abo Hashem
8.	**Year of operation:**	2020/2021

B-Statistical Information

Item	Number of students
Started the program	3
Withdrawn	0
Absence	0
Attending the exam	3
Pass	3
Failed	0

1. Number of students started the program 2020/2021: 3 students.

2. Percentage of students starting the program this year (relative to the previous year):

No. of students this year (2020/2021)	No. of students last year (2019/2020)	No. of students last year (2018/2019)
3	**3**	**2**

3. Number of students completing the program:

No. students completed the program 2020/2021	Starting year of these students
2	Reham Mohammed Elsaeed Hamed (٢٠١٨/٠٩/٣٠) Ghada Mahmoud Ahmed Abbas (٢٠١٧/٠٩/١٩)

4. Grades of students completed the program in the academic year 2020/2021:

	Course title	Grade	
		Reham Hamed	Ghada Abbas
First Semester courses:	Biotechnology and Genetic Engineering (I)	78	78
	Applications on structural Elucidation of Natural Products	96	81
Second semester courses:	Biotechnology and Genetic Engineering (II)	82	79
	Natural Toxins	89	-
	Natural Product Based Drug Design and Discovery	-	100
General University requirements	TOEFL/IELTS	√	√
	Thesis Eligibility report	√	√
	One published manuscript	√	√

- **Grades: no. and percentage of each grade:** Non applicable

C. Professional information

Academic standards

1. **Reference academic standards:** Academic reference standards (ARS) for graduate studies.
2. **Achievement of program Intended Learning Outcomes (ILOs):**

Course Title	ILOs covered
Biotechnology and Genetic Engineering (I)	A1, A2, A4, B1, B6, C1, C3, D1, D2, D6
Applications on structural Elucidation of Natural Products	A1, A3, A6, B1, B2, B7, C1, C3, C4, D2, D3, D8
Biotechnology and Genetic Engineering (II)	A1, A2, A4, B1, B6, C1, C3, D1, D2, D6
Natural Toxins	A1, A2, A5, B1, B3, C1, D1, D3, D4
Natural Product Based Drug Design and Discovery	A1, A3, A6, B1, B2, B7, C1, C3, C4, D2, D3, D8
Thesis	

3. **Assessment methods:**

Assessment Method	Item assessed	ILOs assessed
Biotechnology and Genetic Engineering (I)	Written Assessment (written exam, Thesis writing)	A1, B1, B6, C1, D1, D2
	Oral Assessment Oral exam,)	A2, A4, C3
	Activity	D6
Applications on structural Elucidation of Natural Products	Written Assessment (written exam, Thesis writing)	A1, A3, B1, B2, C1, C3, D3, D8
	Oral Assessment Oral exam,)	A6, B7, C4, D2
	Activity	C4, D2
Biotechnology and Genetic Engineering (II)	Written Assessment (written exam, Thesis writing)	A1, A4, B1, C1, C3, D2, D6
	Oral Assessment Oral exam,)	A2, B6
	Activity	D1
Natural Toxins	Written Assessment (written exam, Thesis writing)	A1, A2, B3, C1, D3, D4
	Oral Assessment Oral exam,)	A5, B1
	Activity	D1
Natural Product Based Drug Design and Discovery	Written Assessment (written exam, Thesis writing)	A1, A3, B7, C1, C3, C4, D8
	Oral Assessment Oral exam,)	A6, B1, B2
	Activity	D2, D3
Pass	General University Requirements: including: a- TOEFL / IELTS b- Computer course	

4. Learning resources:

Adequacy of the number and specialty of the faculty members to the requirements of the program:

-Number of department staff: 27

-Number of Ph.D. students: 9

-Students/ staff ratio: 1:3

•**Regarding teaching of the courses & thesis supervision:** Pharmacognosy staffs are responsible for courses delivery

•**Adequacy of facilities for thesis completion:**

-research laboratories in the department supported with different instruments in addition to central laboratory in the faculty.

Resources are available for the students such as:

- **Books: Text books as**

-Biotechnology and Genetic Engineering, By Kathy Wilson Peacock, 2001

-Biotechnology: Genetic fundamentals and genetic engineering, By Hans-Jürgen Rehm, Alfred Pühler, Gerald Reed, 2003

-Spectroscopic identification of organic compounds, Robert M. Silverstein, Francis X. Webster and David J. Kiemle 7th. (2009)

- Spectroscopic methods in organic chemistry, DH Williams and I Fleming, McGraw-Hill, 2005.

-Modern NMR spectroscopy, Sanders, J.K.M., Hunter, B.K.; Oxford: New York, 2005

- Gohar A.Ahmed, Hand book of plant cell, Tissue and organ culture, 2010

-Biotechnology: Genetic fundamentals and genetic engineering, By Hans-Jürgen Rehm, Alfred Pühler, Gerald Reed, 2003

-Principles of Drug Discovery (Part I), Chapter 1: Drug Discovery from Natural Products, By A. Douglag Kinghorn, 2010

-Natural product drug discovery and therapeutic medicine, By Lixin Zhang and Arnold L. Demain, Humana Press, 2003

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
PhD Program Report
2020/2021
Postgraduate Studies

- **References:**

- Adams, R. P., 2007. Identification of essential oil components by gas chromatography/mass spectrometry, vol. 456. Allured publishing corporation Carol Stream, IL.
- Agrawal, P. K., 1989. Carbon-13 NMR of flavonoids. Stud. Org. Chem., **39**, XVI-564.
- Balbaa, S., Hilal, S., Zaki, A., 1981. Medicinal plant constituents, 2nd ed. General Organization for University and School Books, Egypt, PP. 190-255.
- Boulos, L., 2002. Flora of Egypt: Verbenaceae-Compositae, vol. 3. Al Hadara Pub, PP. 10-12.
- Chizzola, R., 2013. Regular monoterpenes and sesquiterpenes (Essential oils). In Natural Products; Ramawat, K.G., Mérillon, J.-M., Eds.; Springer: Berlin/Heidelberg, Germany, pp. 2973–3008.
- Halim, A., Mashaly, M., Sandra, P., 1990. Constituents of the essential oil of *Mentha microphylla* C. Koch. Egypt. J. Pharm. Sci., **31**(1-4), 437-441.
- Hoton-Dorge, M., De Wachter, M., 1975. J. Pharm. Belg., **10**, 405.
- Mabry, T., Markham, K., Thomas, M., 1970. The Systematic identification of flavonoids, Springer-Verlag, Berlin, Heidelberg and New York.
- Markham, K. R., 1982. Techniques of flavonoid identification (Vol. 36): Academic press London.

Others: web sites:

http://www.fao.org/docrep/003/X3910E/X3910E04.html

http://www.chemistry.cccsu.edu/glagovich/teaching/472/uvvis/uvvis.html
http://www.chem.csustan.edu/Tutorials/INFRARRED.HTM
http://www.science.widener.edu/svb/nmr/nmr.html
http://www.chipo.chem.uic.edu/web1/ocol/spec/MS.html

http://www.fao.org/docrep/003/X3910E/X3910E04.html

http://www.fao.org/docrep/003/X3910E/X3910E04.html

5. The basis of formation of committees' examiners:

For courses and seminars: Teaching members and the head of department.

For thesis: The examiner committee is composed of:

- The principal supervisor with or without one supervisor from the co-supervision committee plus two evaluators at least one from outside the faculty.

6. System of external examiners: Available ■ Not available □

Department response to student and external evaluation system:

Department staff members usually respond to the interests of postgraduate students if they prefer to go deep in specific fields.

The system of external evaluation of the program has been established by Prof. …… Faculty of pharmacy, ……University. The comments of external evaluator will be taken into consideration in the next action plan.

7. Proposals for program development

a- Program stucture

- **Program duration:** At least 2 years from the approval date of university council of graduate studies ad research on the registration of the PhD thesis.
- **Program level:** Graduate
- **Structure of program hours:**

	Code	Course Title	Lecture	Total Credit Hours
Semester 1	PGP-301	Biotechnology and Genetic Engineering (I)	2	2
	PGP-302	Applications on structural Elucidation of Natural Products	2	2
Semester 2	PGP-303	Biotechnology and Genetic Engineering (II)	2	2
	PGP-304	Natural toxins	2	2
	PGP-305	Natural Product Based Drug Design and Discovery	2	2
Total (courses)			8	8
		Thesis	42	42
Total			50	50

b. Distribution of program courses:

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
PhD Program Report
2020/2021
Postgraduate Studies

	Course title	Credit hours	Degree			
			Written	Oral	Total	Exam time
Semester 1	Biotechnology and Genetic Engineering (I)	2	90	10	100	2
	Applications on structural Elucidation of Natural Products	2	90	10	100	2
Semester 2	Biotechnology and Genetic Engineering (II)	2	90	10	100	2
	Natural toxins	2	90	10	100	2
	Natural Product Based Drug Design and Discovery	2	90	10	100	2

c. Thesis details

م	اسم الباحث	عنوان الرسالة	تاريخ القيد	تاريخ التسجيل	تاريخ المناقشة	تاريخ المنح	لجنة الإشراف				الدرجة والتخصص
١	ريهام محمد السعيد حامد	مركبات نشطه بيولوجيا من مجموعه مختاره من النباتات المضاده للفيروسات والسامه للخلايا السرطانية	٢٠١٧/١٢/٠٩	٢٠١٨/٠٩/٣٠	٢٠٢٠/١٠/٢٠	٢٠٢٠/١٢/٠٨	د. أحمد عوض زكى بيومى عوض	أ.د. احمد محمد محمد زغلول	أ.د. مديحه أمين حسن توفيق	د. أمل فتحى سليمان أحمد شحاته	درجة دكتورالفلسفه فى العلوم الصيدلية (العقاقير)
٢	غاده محمود احمد عباس	[دراسة لنبات الخرشوف كمصدر محتمل لمركبات نشطة بيولوجيا]		٢٠١٧/٠٩/١٩	٢٠٢١/٦/٢٣	٢٠٢١/٠٨/١٠	د. أمل أحمد حمدى عطوه سلام	أ.د. محمد فريد ابراهيم محمد لهلوب	أ.د. أحمد أبو الغيط أحمد جوهر	أ.د. فاطمه محمد عبد الرحمن عبد البر	درجة دكتورالفلسفه فى العلوم الصيدلية (العقاقير)

d. Course, deletions, additions and modifications

***More advanced techniques in pharmaceutical analysis will be added to the course.**

e. Staff development requirements:

- **More advanced text books are needed.**
- **Improvement of IT facilities.**

8. Action plan

The following action plan will be acted upon throughout year (2020/2021)

Action	Completion date	Responsible party

Updating the course according to the most up-to-date scientific research.	**September 2021**	**Allmembers of the course team.**

9. Action plan for improvement:

Action	Person responsible	Completion date
Revision of program ILOs and make required changes	• Program coordinator	2019-2020
Arrange at least one journal club per year	• Program coordinator	2019 - 2020
Improve research facilities	• Vice dean for postgraduate studies and research	2019-2020
Update course contents	• Program coordinator	2019-2020
Organize different workshops to build up students research abilities	• FLDP center • Faculty training unit	2019-2020

Head of the department: Prof. Dr. Mona G. Zaghloul

Vice dean of graduate studies and research: Prof. Dr. Khaled B. Selim

Department of : Pharmacognosy

Program: **PhD degree in Pharmaceutical science**
((*Pharmacognosy*))

Course: Biotechnology & Genetic engineering in pharmacognosy I.
Code: (PGP301)

Academic year: *2020/2021*
First Semester

تقرير مقرر التقنية الحيوية والهندسة الوراثية في العقاقير-١	**البرنامج** دكتوراه
منسق المقرر ا. د. احمد جوهر	**رئيس القسم** أ د. منى جودة زغلول

University: Mansoura

Faculty: Pharmacy

Department: Pharmacognosy

A. Basic Information

Course Title and code:	Biotechnology & Genetic engineering in pharmacognosy I (PGP301)
Program on which this course is given:	PhD degree in Pharmaceutical science
Total Credit hours:	2
Lectures: 2 hr	**Tutorial/Practical:** -
Academic Level	Postgraduate
Academic year	2020/2021 - First semester
Name of lecturers contributed to the delivery of this course	1. **Prof. Dr. Ahmed Gohar** 2. **Dr.Amal Fathy Soliman**
Course co-coordinator:	**Prof. Dr. Ahmed Gohar**
External evaluator:	
Date of Department Council Approval	**4/2020**
Date of Faculty Council Approval	20/3/2021

B. Statistical Information:

No. of students attending the course : 3

No. of students completing the course: 3

Exam Results

Passed No.: 3 **percentage: 100%**

Failed No.: - **percentage: -**

Grading of successful students (%) :

A+		**A**	**100%**	**A-**	
B+		**B**		**B-**	
C+		**C**		**C-**	
D+		**D**		**D-**	

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
Course Report
2020/2021
Postgraduate Studies

C. Professional Information:

1. Course teaching:

No.	Topics actually taught
1.	**Basic principles and concepts**
2.	**Application of PTC**

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 / Workshop:	+
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. Ahmed Gohar
2. Dr. Amal Fathy Soliman

c. Role of external evaluator (If any):
Please make paraphrasing to the following sentences, or suggest new one 1. Revision of course contents, and suggest new topics. 2. Revision of teaching and learning strategy. 3. Revision of course notes and suggest enhancement plan 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: **Non**

6. Student evaluation of the course: ….

List any criticisms and response of course team

criticisms	response of course team
Non	

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

Comment	Response
Non	

8. Course enhancement suggestions:

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

Action	Completed	Not completed	Why not completed?
Ex: . Upgrade course note Or Upgrading teaching strategy	√		

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
Course Report
2020/2021
Postgraduate Studies

in practical sessions from drawing and illustration to presentations ……. ……			

9. Action plan for academic year 2021 - 2022:

Action Required	Person responsible	Completion Date

	Name	Signature
Course Coordinator	**Prof. Dr. Ahmed Gohar**	
Head of Department	**Prof. Dr. Mona G.Zaghloul**	

Department of pharmacognosy

Program: PhD in Pharmaceutical Sciences
(**pharmacognosy**)

Course: Application on structural elucidation of natural products
Code: (PGP-302)

Course Report

Academic year: 2020/*2021*
First Semester

البرنامج	تقرير مقرر
دكتور الفلسفة في العقاقير	تطبيقات علي إستنباط التركيب البنائي للنواتج الطبيعية
رئيس القسم	منسق المقرر
أ د. منى جودة زغلول	د.زين العابدين متولى نعيم

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
Course Report
2020/2021
Postgraduate Studies

University: Mansoura

Faculty: Pharmacy

Department: Pharmacognosy

A. Basic Information

Course Title and code:	Application on structural elucidation of natural products (PGP-302)
Program on which this course is given:	PhD degree of Pharmacognosy
Total Credit hours:	2
Lectures:	**Tutorial/Practical:**
Academic Level	Postgraduate
Academic year	2019/2020 - First or second semester
Name of lecturers contributed to the delivery of this course	1. Zain Elabdin Metwaly Naem 2. Iman Ezzat Helal
Course co-coordinator:	Zain Elabdin Metwaly Naem
External evaluator:	
Date of Department Council Approval	3/2021
Date of Faculty Council Approval	

B. Statistical Information:

No. of students attending the course: 3
No. of students completing the course: 3
Exam Results
Passed No.: 3 **percentage: 100%**
Failed No.: 0 **percentage: 0%**
Grading of successful students (%) :

A+		**A**		**A-**	
B+		**B**		**B-**	
C+		**C**		**C-**	
D+		**D**		**D-**	

C. Professional Information:

1. Course teaching:

No.	Topics actually taught
1.	Introduction to UV spectrosopic technique and its applictions on conjugated dienes
2.	UV applications on conjugated enones and aromatics
3.	Introduction to IR spectrosopic technique and its applictions on aliphatic & aromatic compounds
4.	IR functional groups in different classes
5.	Introduction to H-MMR spectrosopic technique, definition & basic priciple
6.	H-NMR chemical shifts in olefins and aromatics, complex spin system and coupling constant values
7.	Introduction to C13-MMR spectrosopic technique, definition & basic priciple
8.	APT & DEPT and 2D NMR techniques
9.	Introduction to MS spectrosopic technique, definition, C1-MS, FD-MS & FAB-MS
10.	McLafferty rearrangment and retro Diels-Alder in mass spectroscop

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:	**Non**
Seminar / Work shop:	**Non**
Class Activity:	**Non**
Case Study:	**+**
Other assignments / home work:	**+**

3. Student Assessment:

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
Course Report
2020/2021
Postgraduate Studies

a. Method of Assessment	Percentage of total
Written examination	**90 %**
Oral examination	**10 %**
Practical / laboratory work	**0 %**
Semester Work	**0%**

b. Members of examination committee:

1. Zain Elabdin Metwaly Naem
2. Iman Ezzat Helal

c. Role of external evaluator (If any):

Please make paraphrasing to the following sentences, or suggest new one
1. Revision of course contents, and suggest new topics.
2. Revision of teaching and learning strategy.
3. Revision of course notes and suggest enhancement plan
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

Non

6. Student evaluation of the course: ….

List any criticisms and response of course team

criticisms	response of course team
Non	

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

Comment	Response
Non	

8. Course enhancement suggestions:

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

Action	Completed	Not completed	Why not completed?
Ex: . Upgrade course note	√		

9. Action plan for academic year 2021 - 2022:

Action Required	Person responsible	Completion Date
Practical training	Dr. Mona Zaghloul	next year

	Name	Signature
Course Coordinator	Zain Elabdin Metwaly Naem	
Head of Department	Mona Goudah Mohamed Zaghlol	

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
Course Report
2020/2021
Postgraduate Studies

Department of : Pharmacognosy

Program: PhD in Pharmaceutical Sciences
(*pharmacognosy*)

Course: Biotechnology & Genetic engineering in pharmacognosy II.
Code: (PGP303)

Course Report

Academic year: *2020/2021*
Second Semester

البرنامج	تقرير مقرر
دكتور الفلسفة	التقنية الحيوية والهندسة الوراثية في العقاقير-II

رئيس القسم	منسق المقرر
أ د. منى جودة زغلول	ا. د. أحمد أبو الغيط جوهر

University: Mansoura

Faculty: Pharmacy

Department: Pharmacognosy

A. Basic Information

Course Title and code:	Biotechnology & Genetic engineering in pharmacognosy II (PGP303)
Program on which this course is given:	PhD degree in Pharmaceutical science
Total Credit hours:	2
Lectures: 2 hr	**Tutorial/Practical:** -
Academic Level	Postgraduate
Academic year	2020/2021 – second semester
Name of lecturers contributed to the delivery of this course	1. **Prof. Dr. Ahmed A. Gohar** 2. **Dr. Amal Fathy Soliman**
Course co-coordinator:	**Prof. Dr. Ahmed A. Gohar**
External evaluator:	
Date of Department Council Approval	مجلس قسم شهر ٤ او مجلس قسم شهر ٧
Date of Faculty Council Approval	

B. Statistical Information:

No. of students attending the course: 3

No. of students completing the course: 3

Exam Results

Passed No.: 3 **percentage: 100%**

Failed No.: - **percentage: -**

Grading of successful students (%) :

A+		**A**		**A-**	**33.33%**
B+	**33.33%**	**B**	**33.33%**	**B-**	
C+		**C**		**C-**	
D+		**D**		**D-**	

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
Course Report
2020/2021
Postgraduate Studies

C. Professional Information:

1. Course teaching:

No.	Topics actually taught
1.	**Basic principles and concepts**
2.	**Application of PTC**

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. Ahmed A. Gohar

2. Dr. Amal Fathy Soliman

c. Role of external evaluator (If any):
1. Revision of course contents, suggesting new topics. 2. Revision of teaching and learning methods. 3. Revision of Exam.

4. Facilities and Teaching Materials

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

5. Administrative constraints

List any difficulties encountered: Non

6. Student evaluation of the course: ….

List any criticisms and response of course team

criticisms	response of course team
Non	

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

Comment	Response
Non	

8. Course enhancement suggestions:

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

Action	Completed	Not completed	Why not completed?
Ex: . Upgrade course note	√		

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
Course Report
2020/2021
Postgraduate Studies

9. Action plan for academic year 2021 - 2022:

Action Required	Person responsible	Completion Date
Add practical work procedure	**Dr. Amal Fathy Soliman**	**March 2022**

	Name	Signature
Course Coordinator	**Prof. Dr. Ahmed A. Gohar**	
Head of Department	**Prof. Dr. Mona G.Zaghloul**	

Department of pharmacognosy

Program: PhD in Pharmaceutical Sciences
(*specialization*)

Course: Natural Product Based Drug Design and Discovery

Code: (PGP-305**)**

Course Report
Academic year: *2020/2021*
Second Semester

البرنامج	تقرير مقرر
دكتور الفلسفة	أكتشاف وتصميم الادويه من منتجات طبيعيه
رئيس القسم	منسق المقرر
أ د. منى جوده زغلول	د. أمل]جلاله

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
Course Report
2020/2021
Postgraduate Studies

University: Mansoura

Faculty: Pharmacy

Department: Pharmacognosy

A. Basic Information

Course Title and code:	Natural Product Based Drug Design and Discovery code PGP-305
Program on which this course is given:	Ph.D.
Total Credit hours:	(2+0)
Lectures: 6	**Tutorial/Practical: ٣**
Academic Level	Postgraduate
Academic year	2020/2021 - second semester
Name of lecturers contributed to the delivery of this course	1. Dr. Amal A. Galala 2.Dr. Amal A. Sallam
Course co-coordinator:	Dr. Amal A. Sallam
External evaluator:	
Date of Department Council Approval	April 2021
Date of Faculty Council Approval	April 2021

B. Statistical Information:

No. of students attending the course : 3
No. of students completing the course: 3
Exam Results
Passed No.: 3 **percentage: 100%**
Failed No.: 0 **percentage:0%**
Grading of successful students (%) :

A+		**A**	**2**	**A-**	
B+		**B**	**1**	**B-**	
C+		**C**		**C-**	
D+		**D**		**D-**	

C. Professional Information:

1. Course teaching:

No.	Topics actually taught
1.	Introduction on drug discovery and drug development.
2.	Some modern concepts in drug discovery.
3.	Lead discovery, Lead optimization, Important interactions (forces) involved in drug-receptor complex.
4.	Fundamental features needed for the anti-cancer drug paclitaxel to be active, structural activity relationship.
5.	Bioisosteres, Pro-drugs and hard drugs and soft drugs.
6.	Kojic acid derivatives as tyrosinase inhibitors.

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:	**Power point**
Practical Training/ Laboratory:	**Not applied**
Seminar / Work shop:	**Self learning**
Class Activity:	**Scientific articles**
Case Study:	**Not applied**
Other assignments / home work:	**yes**

3. Student Assessment:

a. Method of Assessment	Percentage of total
Written examination	**90**
Oral examination	**10**
Practical / laboratory work	**0**
Semester Work	**0**

Mansoura University
Faculty of Pharmacy
Quality Assurance Unit
Course Report
2020/2021
Postgraduate Studies

b. Members of examination committee:
1. Dr. Amal A. Galala.
2. Dr. Amal A. Sallam

4. Facilities and Teaching Materials

Totally adequate	√
Adequate to some extent	-----
Inadequate	-----
List any inadequacies:	**Not applied**

5. Administrative constraints

List any difficulties encountered:
No adminstrative constraint

6. Student evaluation of the course: ….

List any criticisms and response of course team

criticisms	response of course team
No	**Not applied**

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

Comment	Response
No	**Not applied**

8. Course enhancement suggestions:

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

Action	Completed	Not completed	Why not completed?
Ex: . Upgrade course note	√		

9. Action plan for academic year 2021 - 2022:

Action Required	Person responsible	Completion Date
Updating the course lectures' content with new aspects in drug discovery and drug development.	Staff members	
Applying latest methodologies as virtual docking to discover drugs for current diseases	Staff members	

	Name	Signature
Course Coordinator	Dr. Amal A. Galala	
Head of Department	Prof. Mona Gouda Zaghlol	