Quality Assurance Unit

Tanta University

Faculty of Medicine

Department of Medical Pharmacology

Course specifications

Medical Pharmacology Master Degree (2nd semester) (2021 Bylaw)

2021-2022

Medical Pharmacology Master Degree Course specifications

University: Tanta Faculty: Medicine Department: Medical Pharmacology

1- Administrative information:

1- Course title: Master Medical Pharmacology

2- Department offering the program: Medical Pharmacology Department.

3- Department responsible for the course: medical pharmacology department.

4- Course code: PHAR 8003

5- Level: Second part.

6- No. of Credit hours of the course: 10 credits as follows: Obligatory courses including: 7credit hours lectures and 1 credit hours practical

7-Course Progress Supervisor: Prof. Dr. Amany Abdin Prof. Of pharmacology, Tanta faculty of medicine

8-Internal Evaluator of the course: Prof. Dr. Fleur Abdel Monem Prof. of pharmacology, Tanta faculty of medicine

9-External Evaluator of the course: Prof.Dr. Mohammed Hesham Dabba, Prof. of clinical pharmacology, Damietta faculty of medicine

10- Authorization date of course specification: 6-12-2021

B- Professional Information

1 – Overall Course aims:

***By the end of the course, the graduate student should be able to do the following*:**

1. **Perfect the bases and methods of medical researches**
2. **Apply analytical methods when dealing with medical problem**
3. **Apply medical knowledge and merge it with related knowledge**
4. **Oriented with the current medical problems, and up dates in pharmacology**
5. **Detect professional problems and suggest solutions**
6. **Perfect professional skills, and use of technological tools needed in practice**
7. **Communicate and lead team in systematic professional manner**
8. **Decision making through analysis of available information**
9. **Effectively manage available resources**
10. **Oriented with role in community development, and environmental safety**

11. React in professional manner reflecting commitment towards impartiality, credibility, medical ethics, and responsibilities

12. Realize the importance of self-development and continuous medical education

2 – Intended learning outcomes (ILOs):

a. Knowledge and understanding:

a.1-Define the basic theories, principles of pharmacology and related sciences needed in his career

a.2-Demonstrate the interaction between medical practice and surrounding environment.

a.3-Learn the recent advances in pharmacology.

a.4-Learn the principles and ethics of medical research

b. Intellectual skills:

b. 1- Analyze medical information and relate it to medical problem solving in pharmacology

b.2-Solve medical problem related to his pharmacology

b. 3- Expect the relative risks and benefits of options of commonly used drugs

b. 4- Plane to guide progress in his career (designing protocols for therapy)

c. Professional and practical skills:

c. 1-Perfect basic and recent professional medical skills in pharmacology

c. 2- Practice and interpret drug related research

c. 3- Evaluate medical methods and tools used in pharmacology

d. General and transferable skills:

d. 1- Apply self-evaluation and specify his medical educational needs

d. 2-Use different learning resources to get knowledge and information

d. 3- Practice team working, and lead teams in specified professional jobs

d. 4-Manage time perfectly

3-Course contents

Topics	Theoretical/actual hours	Credit hours	Practical	Credit hours
General pharmacology	**General pharmacology (30 hours)**	**7**	General Laboratory Safety (5 hours)	**1**

Topics	Theoretical/actual hours	Credit hours	Practical	Credit hours
Autacoids **Drugs affecting autonomic nervous system** **Drugs used in Respiratory diseases** **Anti-inflammatory drugs**	Pharmacokinetics: 15 hours Pharmacodynamics: 10 hours Molecular & cellular targets of drug action Drug-receptor interactions G protein coupled receptors Organization in Signal Transduction Rational Dosing & the Time Course of Drug Action Adverse drug interactions& drug-drug interactions **Autacoids (15 hours)** Histamine, Serotonin, & the Ergot Alkaloids (5hours) The Eicosanoids: Prostaglandins, Thromboxanes, Leukotrienes, & Related Compounds (5 hours) Nitric Oxide &Vasoactive		Biological Safety, Blood borne Pathogens, Biological Waste Management, Emergency Response Radiological Safety Awareness Emergency Preparedness/Emergency Action Plans Life, Fire and Electrical Safety Chemical Safety, Hazard Communication Chemical Waste Management (5hours) Animal handling and dissection &Blood sampling (5 hours) Responsible Conduct of Research (5 hours) Mouse Models &Concepts in Experimental Design (5 hours) Physiologically based pharmacokinetic modeling (PBPM) (5 hours)	

Topics	Theoretical/actual hours	Credit hours	Practical	Credit hours
	Peptides (5 hours) **<u>Drugs affecting autonomic nervous system (30 hours)</u>** Introduction to Autonomic Pharmacology (3 hour) Cholinoceptor-Activating & Cholinesterase-Inhibiting Drugs (5hours) Cholinoceptor-Blocking Drugs (5 hours) Adrenoceptor Agonists & Sympathomimetic Drugs (5 hours) Adrenoceptor Antagonist Drugs (5 hours) Pharmacology of the eye(2 hours) Skeletal muscle relaxants(5 hours) **<u>Drugs used in Respiratory diseases (15 hours)</u>** Drugs used in bronchial asthma (8hours) Cough therapy (7 hours) **<u>Anti-inflammatory drugs (15 hours)</u>**			

4-Teaching and learning methods

Teaching Method	ILOS Covered
Illustrated lectures	a1, a3, b1
Tutorial sessions	a2, a4, b3, b4, b5, d1
Practical Training	c1, c2, c3
Teaching under observation,	c1, c2. c3
PBL	b1, b2, b3, b4, b6

5-Student Assessment

Final exam included as a part of the 2nd part exam

Methods of assessment	ILOS Covered
Practical	(b1, 2, 3, c1)
oral	(a1, 3, b1, 2, 5, c.1, 3, d4)
Written	(a1, 3, b1, 3, C3,)
Log book	(d3, 6, 7)

6- Weighing of assessments

درجة الماجستير فى الفارماكولوجيا الطبية
Master of Science in Medical Pharmacology (PHAR 800)

	المقرر الدراسى	الكود	الساعات المعتمدة	عدد الأوراق	الامتحانات				
					نظرى	عملى	شفوى	الليزر	مجموع الدرجات
الجزء الأول	يختار الطالب مادة واحدة من: 1. الكيمياء الحيوية الطبية. 2. الفسيولوجيا الطبية.	PHAR 8001 PHAR 8002	٨	١	١٢٥	٧٥	٥٠		٢٥٠
	مقررات اختيارية		١						
	أنشطة طبية		١						
الرسالة			١٢						
الجزء الثانى	- مقرر علمي وعملي فى علم الأدوية 1 - مقرر علمي وعملي فى علم الأدوية2 - مقرر علمي وعملي فى علم الأدوية التطبيقى	PHAR 8003 PHAR 8004 PHAR 8005	٨ ٨ ٨	١ ١	١٧٥ ٢٠٠	١٢٥ ١٠٠	٧٥ ٧٥		٧٥٠
	مقررات اختيارية		٣						
	أنشطة طبية		٣						
المجموع			٥٢		٥٠٠	٣٠٠	٢٠٠		١٠٠٠

7- List of references

7-1 Essential books (text books)

-Goodman & Gilman's: The Pharmacological Basis of Therapeutics.

-Basic & Clinical Pharmacology (ed. G. Katzung)

7-2Recommended books

- Pharmacology (ed. Rang H.P. & Dale M.)

-Lippincott (illustrated pharmacology Review).

- Pharmacology board review (Gary C.Rosenfeld & David S. Loose)

-Clinical Pharmacology (DR. laurence)

7-3- Periodical, web sites:

-Br. J. Pharmacology - Biochemical Pharmacology

-www. biomed central com. -www. Pubmed. Com

-www. medscape. Com. www.eulc.edu.eg

www. Science direct. Com www.Wiley Blackwell.com

www.Springer.com

8- Other resources/ facilities required for teaching and learning achieving the above ILOs

None

9-we certify that all of the information required to deliver this course is contained in the above specifications and will be implemented

We verify that the above Course and the analysis of students and external evaluator opinions are accurate.

Course coordinator

Name: Dr. Amira el-saadany Signature. …….. Date 6/ 12/2021

Head of department
Name: Prof .Amany Abdin Signature …… Date 6/ 12/2021

Head of quality assurance unit:

Name …….. Signature. ……..
Date……..