



Quality Assurance Unit



Tanta University  
Faculty of Medicine

**Department of Medical Pharmacology**

**Course Specifications**

**Medical Pharmacology**

**Third Year**

**2011-2012**

Anatomy First Year Course specifications

University: Tanta

Faculty: Medicine

Department: Medical Pharmacology

### 1- Administrative Information

- **Course title: Medical Pharmacology**
- **Code: TMED.03:02**
- **Department offering the course: Medical Pharmacology**
- **Program (s) on which this course is given: M.B.B.Ch**
- **Departments offering the program: Medical Pharmacology and all other departments**
- **Academic year/Level : Third year of M.B.B.Ch**
- **Semester in which the course is given: 2011-2012**
- **Date of approval by department/faculty council : 21/9/2011**
  - The Board of Department of Medical Pharmacology on:**
  - The Internal Quality Assurance & Accreditation Center: on:**
  - Council of the Faculty of Medicine, Tanta University on:**
- **Taught hours:**
  - **Lectures :120 hours**
  - **Tutorial /Practical : 60hours**
  - **Total : 180 hours**

### 2 – Overall Course Aims

- Help the students for clear understanding the basic knowledge about commonly used groups of drugs, pharmacokinetics, mode of actions, pharmacological actions and their therapeutic applications in various diseases.
- Full understanding safe usage through learning their adverse effects including toxicity, contraindications and drug interactions.

### 3- Intended learning outcomes (ILOs):

#### a- knowledge and understanding:

By the end of the course the student should be able to

a1-Describe the pharmacokinetics pharmacodynamics and pharmacotherapeutics of different groups of drugs.

a2- Recognize the adverse effects including acute and chronic toxicity of commonly used groups, and their management.

- a3-List limitations to the use of drugs such as contraindications and drug interactions.
- a4- Observe variations during drug application with regard age, sex and genetic related variations that affect response to drugs.
- a5- Understand the mechanism of action of drugs with regard pathophysiology of diseases which is essential for further proper choice of drugs.
- a6- Identify the impact of preventive pharmacology in prevent illness.
- a7- Identify the role, prevalence and limitations of alternative and complementary therapies commonly in use.
- a8- Identify the principles and possible applications of gene therapy.

By the end of the course the student should be able to

**b- Intellectual skills :**

- b1- Predict patients with life / organ threatening conditions and estimate first aid and initial therapy.
- b2- Predict the different diseases with special different pathological situations in order to reach the proper drug of choice based on pharmacological and pathological principles.

**c- Professional & practical skills :**

By the end of the course the student should be able to

- c1-Apply available facilities for early recognition and management of acute illnesses; including common medical and surgical emergencies.
- c2- Obtain practical experimental skills mainly on animals in vivo and in vitro (record the effect of drugs on biological tissues) with illustration of different techniques of drug administration.
- c3- Write a prescription for selected important diseases.
- c4- Audit prescriptions citing multiple drugs

**d-General transferable skills :**

By the end of the course the student should be able to

- d1- Understand the importance of life-long self-learning and show a strong commitment to it.
- d2- Respect ethics related to drug prescription and use specially to drugs liable to produce abuse.
- d3-Work collaboratively with other health professionals in other disciplines to maximize patient benefits and minimize the risk of errors.
- d4-Identify his/her personal weaknesses through accurate self-assessment and/or supervisors and colleagues and actively set a clear learning plan to address these weaknesses.
- d5-Utilize the resources of biomedical information including the available electronic facilities to update his/her knowledge

#### 4- Topics (Contents of the course)

Topic	No. of hrs.		
	Lectures	Practical/Applied and tutorial	Total
1- General pharmacology and drug interactions	8	2	10
2- Autonomic Nervous System	14	2	16
3- Ocular Pharmacology	2	2	4
4- Skeletal muscle relaxants	2	2	4
5- Autacoids	4	2	6
6- Respiration	4	2	6
7- Renal pharmacology	6	-	6
8- Cardio-vascular pharmacology	12	10	22
9- Blood	8	4	12
10- Psycho-neuro-pharmacology and drug abuse	18	14	32
11- Hormones and their antagonists	12	4	16
12- Gastro-Intestinal tract	8	2	10
13-Chemotherapy	14	4	18
14- Vitamins	2	-	2
15- Immuno-pharmacology	2	-	2
16- Gene therapy	2	-	2
17 -locally acting drugs	2	2	4
18- Prescription writing	-	4	4
19-Practical revision	-	4	4
Total	120	60	180

#### 5-Teaching and learning methods

##### -Teaching methods

##### 5.1 Traditional methods like:

A-Lectures

B-Tutorial

a- Practical modules

b- Applied modules.

##### 5.2 Non traditional methods like:

A-Small group method

B-Field training visits

**-Teaching plan -**

Item	Time schedule	Teaching hours
Lectures	2 times/week	4
Practical classes	Once/week	2
Total	3times/week	6

**6-Student Assessment :**

**a) Methods used**

- 1- Written exams ( Short essay, list in table and reasoning questions) to assess a1-8,b1-2.
- 2- Oral examination for whole course to assess a1-8,b1-2.
- 3- Practical modules: comment on practical experiment through written questions ,Log book(students must fulfill 75%of attendance) to assess c1-4,d1-5 , and applied modules (M.C.Qs.,fill the blanks, prescription writing, case study, true or false) to assess a3,a5,a6,b1-2,c1-4,d1-5

**b)- Assessment schedule التوقيت**

Assessment	Week
1-Mid-year examination	1 <sup>st</sup> week after midyear vacation
2-Three periodical examination	Two in the 1 <sup>st</sup> term and one in the 2 <sup>nd</sup> term
3-Presentation of Log book of practical and applied classes	During oral examination
4- Practical module exam	Once in May
5-Final Exam.	1 <sup>st</sup> occasion in may ,2 <sup>nd</sup> occasion in September for student who did not pass 1 <sup>st</sup> occasion
6-Oral examination in 2 sessions	After the final exam

**c- Weighing of assessments(توزيع الدرجات)**

Exam	Marks	% of Total
Midterm examination	45	15%
Final term examination	150	50%
Oral examination	40	13.3%
Practical &Applied examination	50	16.7%
Three Periodical examinations	15	5%
Total	300	100%

**d) Attendance criteria:**

1. Practical attendance (The student must fulfill 75% of the attendance/absence list)
2. Practical books(Log book)( The student must fulfill 75% of the attendance/absence by signature of assistant lecture).

### **e) Grading System**

<b>Examination</b>	<b>Topic</b>	<b>Description</b>	<b>Marks</b>
Periodical Examinations	Sheet examinations	Applied analytical and reasoning questions	15 marks
Midterm exam	Written	Short essay, list in table and reasoning questions	45marks
Final Examination	Written	Short essay, applied analytical ,list in table and reasoning questions	150 marks
	Practical exam	M.C.Qs.,fill the blanks, prescription writing, case study, true or false	50 marks
	Oral exam	Oral questions for whole course	40 marks
Total			300

## **7- List of references**

### **7.1 Course notes**

Department staff members 'theoretical books(2 volumes)  
Department staff members 'practical /applied manual (2 volumes).

### **7.2 Text book**

1. Goodman & Gilman's.The pharmacological basis of therapeutics.Hardman J.G.,Timbird L.E ,Molinoff P.B.,Ruddon R.W. and Gilma A.G.(eds).McGraw-Hill
2. Basic& Clinical pharmacology.Katzung B.G.(ed).Appleton& Lang.

### **7.3 Recommended books**

1. Pharmacology.Rang H.P.,Dale M.M. and Ritter J.M.(eds).Churchill livingstone.
2. Martindale: The extrapharmacopeiae.Reynolds J.E.F.(ed).Royal Pharmaceutical Society.

### **7.4 Periodicals and web sites**

1. British Journal in Pharmacology.
2. Journal of Pharmacology and Experimental Therapeutics.
3. <http://www.pubmed.com>
4. <http://www.medscap.com>

**8-Facilities for learning and teaching resources**

**1 -Lecture hall:**

At lecture hall of department. Writing board, over head projector and data show are available.

**2- Laboratory classes**

Course coordinator

Name Prof Dr/ Amany Abdin

Signature.....Date:

Head of department

Name Prof Dr / Mohamed Nabih Abd El-Rahman

Signature.....Date:



### Intended learning outcomes of the course ( A)

Academy / University: Tanta  
Faculty: Medicine  
Department: Medical Pharmacology

<input checked="" type="checkbox"/> The name of course	Medical Pharmacology
Code of course	0302

Topics of the course	Week Study	Knowledge & Understanding	Intellectual Skills	Professional Skills	General transferable skills
Autonomic nervous system	3 weeks and half	a1-a7-	b1-b2-	c1-c4-	D1-d5
Psychoneuro pharmacology and drug abuse	4 weeks and half	a1-a7-	b1-b2-	c1-c4-	D1-d5
Autacoids	One week	a1-a7-	b1-b2-	c1-c4-	D1-d5
General pharmacology and drug interaction	2 weeks	a1-a7-	b1-b2-	c1-c4-	D1-d5
Locally acting drugs and Gene therapy	One week	a1-a7-	b1-b2-	c1-c4-	D1-d5
Respiration	One week	a1-a7-	b1-b2-	c1-c4-	D1-d5
Ocular pharmacology and skeletal muscle relaxant	One week	a1-a7-	b1-b2-	c1-c4-	D1-d5
Blood	2 weeks	a1-a7-	b1-b2-	c1-c4-	D1-d5
Cardiovascular	3 weeks	a1-a7-	b1-b2-	c1-c4-	D1-d5
Renal	One week and half	a1-a7-	b1-b2-	c1-c4-	D1-d5
Gastro intestinal	2 weeks	a1-a7-	b1-b2-	c1-c4-	D1-d5
Hormones and their antagonist	3 weeks	a1-a7-	b1-b2-	c1-c4-	D1-d5
chemotherapy	3 weeks and half	a1-a7-	b1-b2-	c1-c4-	D1-d5

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Vitamins and immunopharmacology	One week	a1-a7-	b1-b2-	c1-c4-	D1-d5
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Course coordinator: Prof Dr/Amany Abd El-Rhim Abdin  
Nabih Abd El-Rahman

Head of the department: Prof Dr / Mohamed

