School of pharmacy

Department

Course title: Pharmacology 1

Credit (Theory or Practical): 3 Theory

Prerequisite: physiology II, Biochemistry

Course Lecturers: Professors of Department of Toxicology and Pharmacology

Responsible Lecturer: Dr. Safaeinejad

Student responsibilities*:*

1- Attendance and class activities (Seminars and projects, Exercises: oral/written exercises, Comprehensive Written Examination: Quiz): 40%

2- Final exam (multiple-choice questions, descriptive questions): 60%

The absence hours of a student should not exceed 4/17 in theoretical, 2/17 in practical and laboratorial. Otherwise, the score for that course or section will be considered as zero.

Note 1: allowed absences are accepted provided that students bring in documents for that and the related professor approves it. Acting against absences (either excused or not) will be the decision of the professor and agreement of the college.

Course Description: Considering that one of the most vital and important part of pharmacy education is familiarity with medications and how they work, Therefore, in this study the mechanism of action of drugs, Different groups of

drugs, The absorption and excretion of drugs, Medications interactions with other compounds in the body, Kinetics of drugs and their proper usage are discussed.

- Course objectives:

1) Generalities of Pharmacology (Definitions)

-Pharmacodynamics, Medical receptors and the mechanism of drug-receptor interactions.

-Pharmacokinetics: Absorption Distribution Metabolism and excretion.

-Basic and clinical assessment of drugs.

2) Medications affecting the autonomic system

-Introduction to Pharmacology autonomic system

-Cholinergic medications

-Anticholinergics

-Adrenergic medications

-Anti-adrenergic medication

3) Medications affecting neuromuscular transmission.

-Histamine and medications affecting it

-Serotonin and medications affecting it

-Eicosanoids: Prostaglandins, Thromboxane, Leukotrienes.

4) Local anesthetic

5) Narcotic pain medications and their antagonists.

6) Drug abuse

7) Medications affecting the central nervous system.

-Introduction to Central Nervous System Pharmacology.

-Sedatives and hypnotics

-Alcohols-Antiepileptic Drugs

-General anesthetics-Drugs used in parkinsonism and other movement disorders

-Antidepressants-Lithium and mania

-Anti-psychotic drugs

8)

Student Learning Objectives:

Students should be able:
-To interpret generalities about receivers and secondary messenger pharmacodynamics.
-To explain the various stages of clinical assessment of drugs.
-To describe different drug groups and interpret their mechanisms.
-To explain the different types of chemical carriers and related drugs.-To list the uses of medications.
-To classify the medications and their uses.
-To explain the variety of side effects of drugs and how to avoid complications.
-To explain the effects of various diseases on the pharmacodynamics and pharmacokinetics.

Students are expected to:

Student will be able to successfully know the category, mechanism of action and adverse effects of drugs

Course Plan: Monday and Tuesday 13-15

نام مدرس	روش تدریس	عنوان مطلب	ساعت	تاریخ	شماره جلسه
Dr. Kheradmand	Interactive lecture	Introduction To Pharmacology	13-15	1403/11/15	1
Dr. Kheradmand	Interactive lecture	Pharmacokinetics (Absorption & Distribution)	13-15	1403/11/16	2
Dr. Abdollahi	Interactive lecture	(metabolism& Pharmacokinetics elimination)	13-15	1403/11/23	3

Dr. Kheradmand	Interactive lecture	Drug Receptors & Pharmacodynamics	13-15	1403/11/29	4
Dr. Aghamiri	Interactive lecture	Introduction To Autonomic Pharmacology	13-15	1403/11/30	5
Dr. Aghamiri	Interactive lecture	Cholinoceptor-Activating & Cholinesterase-Inhibiting Drugs	13-15	1403/12/06	6
Dr. Aghamiri	Interactive lecture	Cholinoceptor-Blocking Drugs	13-15	1403/12/07	7
Dr.Kheradmand	Interactive lecture	Adrenoceptor Agonists & Sympathomimetic Drugs	13-15	1403/12/13	8
Dr.Aghsami	Interactive lecture	Adrenoceptor Antagonist Drugs	13-15	1403/12/14	9
Dr. Abdollahi	Interactive lecture	Histamine	13-15	1403/12/20	10
Dr. Abdollahi	Interactive lecture	Serotonin, & The Ergot Alkaloids	13-15	1403/12/21	11
Dr. Abdollahi	Interactive lecture	The Eicosanoids: Prostaglandins, Thromboxanes, Leukotrienes, & Related Compounds	13-15	1404/01/18	12
Dr. Aghamiri	Interactive lecture	Reproductive & urinary tracts agents	13-15	1404/01/19	13
Dr. Aghamiri	Interactive lecture	Introduction To the Pharmacology of CNS Drugs	13-15	1404/01/25	14
Dr. Aghsami	Interactive lecture	Opioid Analgesics & Antagonists	13-15	1404/01/26	15
Dr. Aghsami	Interactive lecture	Drugs Of Abuse	13-15	1404/02/01	16
Dr. Kheradmand	Interactive lecture	Antiseizure Drugs	13-15	1404/02/02	17
Dr. Safaeinejad	Interactive lecture	General anesthetics	13-15	1404/02/08	18
Dr.Kheradmand	Interactive lecture	local Anesthetics	13-15	04/02/09	19
Dr. Safaeinejad	Interactive lecture	Antidepressant Agents	13-15	1404/02/15	20
Dr.shariatpanahi	Interactive lecture	Sedative-Hypnotic Drugs	13-15	1404/02/16	21

Dr. Aghsami	Interactive lecture	Antipsychotic Agents	13-15	1404/02/22	22
Dr.shariatpanahi	Interactive lecture	Sedative-Hypnotic Drugs	13-15	1404/02/23	23
Dr. Safaeinejad	Interactive lecture	Pharmacologic Management of Parkinsonism & Other movement Disorders	13-15	1404/02/29	24
Dr. Safaeinejad	Interactive lecture	Pharmacologic Management of Parkinsonism & Other movement Disorders	13-15	1404/02/30	25
Dr. Safaeinejad	Interactive lecture	Vasoactive Peptides and kinins	13-15	1404/03/05	26
Dr.shariatpanahi	Interactive lecture	Nonsteroidal Anti-Inflammatory Drugs, Disease-Modifying Antirheumatic Drugs, Nonopioid Analgesics, & Drugs Used in Gout	13-15	1404/03/06	27
Dr.shariatpanahi	Interactive lecture	Nonsteroidal Anti-Inflammatory Drugs, Disease-Modifying Antirheumatic Drugs, Nonopioid Analgesics, & Drugs Used in Gout	13-15	1403/03/12	۲۸

References:

1- Basic and Clinical pharmacology. Katzung BG, Trevor AJ, McGraw-Hill Medical, The latest edition.

2- Rang and Dale's pharmacology. Rang HP, Ritter JM, Flower RJ, Henderson G, Churchill Livingstone, The latest edition