

## Planning and Quality Assurance Affairs

Form (A)

### Course Specifications

#### General Information

Course name	Pharmacology & Antibiotics
Course number	AMSL4228
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

#### Course Objectives

- 1 - This course will introduce the students to building the foundation for understanding medications and their administration. It will also teach pharmacologic principles, drug sources, mechanism of action, side effects, uses and dosage form, and dosage calculations. It will also focus on the characteristics of common medications in the major drug classifications

#### Intended Learning Outcomes

Knowledge and Understanding	<p>* ? Understand basic concepts of pharmacokinetics &amp; pharmacodynamics.</p> <p>? Understand quantitative effects of drugs (concentration/dose-response relationships) ? Identify concepts of agonism, antagonism, partial agonism, inverse agonism, efficacy, and potency ? Identify concepts of selectivity of drugs, species variation, inter-subject variation, wanted, and unwanted drug action, and allergy to drugs ? Apply knowledge of basic pharmacology of antimicrobial agents to explain clinical uses and adverse effects of drugs to treat common disease states. ? Apply knowledge of basic pharmacology of nonsteroidal anti-inflammatory drugs to explain clinical uses and adverse effects for treatment of common disease states. ? Apply knowledge of basic pharmacology of narcotics drugs to explain clinical uses and adverse effects for the treatment of common disease states. ? Apply knowledge of basic pharmacology of corticosteroid drugs to explain clinical uses and adverse effects for treatment of common disease states. ? Apply knowledge of basic pharmacology of muscle relaxants drugs to explain clinical uses and adverse effects for the treatment of common disease states. ? Apply knowledge of basic pharmacology of corticosteroid drugs to explain clinical uses and adverse effects for the treatment of common disease states.</p>
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#### Course Contents

- 1 - A general principle of pharmacology) Pharmacokinetics of the drugs (absorption, distribution, metabolism and excretion) Pharmacodynamics of the drugs (mechanism of drugs action Concepts of selectivity of drugs, inter-subject variation, wanted, and unwanted drug action, and allergy to drugs Antibacterial agents. Antiviral agents. Antiprotozoal agents. Antifungal agents. Anthelmintics drugs Non steroidal anti inflammatory drugs Narcotics drugs Muscle relaxant drugs Corticosteroids drugs Antihistamines drugs Antiemetics drugs
- 2 - Interactive lectures, discussions and audiovisual aids.

## Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
assignments, attendance, midterm, final exam	three assignment during the semester and midterm in the 6 week and the final exam	60% for assignments and midterm while 40% for final exam

## Books and References

Course note	Gersch, C. J., Heimgartner, N. M., Rebar, C. R., & Willis, L. M. (2017). Pharmacology made incredibly easy!. Wolters Kluwer Health.
Essential books	Whalen, K. (2018). Lippincott® Illustrated Reviews: Pharmacology. Wolters kluwer india Pvt Ltd.

## Knowledge and Skills Matrix

Main Course Contents	Study Week	Knowledge and Understanding	Intellectual Skills	Professional Skills	General Skill
General principle of pharmacology Pharmacokinetics of the drugs (absorption, distribution, metabolism and excretion) Pharmacodynamics of the drugs (mechanism of drugs action Concepts of selectivity of drugs, inter-subject variation, wanted, and unwanted drug action, and allergy to drugs Antibacterial agents. Antiviral agents. Antiprotozoal agents. Antifungal agents. Anthelmintics drugs Non steroidal anti inflammatory drugs Narcotics drugs Muscle relaxant drugs Corticosteroids drugs Antihistamines drugs Antiemetics drugs	1st Week 2nd Week 3rd Week 4th Week 5th Week 6th Week 7th Week 8th Week 9th Week 10th Week 11th Week 12th Week 13th Week 14th Week 15th Week	Discussions and audiovisual aids	Interactive lectures		