BIOP211 Pharmacology
Tutorial Session 1: Introduction to Pharmacology

Key Concepts Covered:

1. Introduction to various terminologies used in pharmacology and being able to differentiate them.
2. Overview on Pharmacodynamics.

1.1. Using your text, lecture notes / online resources (see Library website libguides) complete the following

1. Define the following terms
   - Pharmacology
   - Pharmacokinetics
   - Pharmacodynamics
   - Pharmacognosy
   - Apoptosis
   - Necrosis

2. What schedule are prescription-only drugs?
3. Explain regulations governing over-the-counter medicines (OTC), prescription-only drugs and complementary medicines; and outline scheduling of these medicines.
4. Discuss the role of evidence-based medicine in the pre-clinical, clinical and post-marketing surveillance of OTC (over-the-counter) medicines, CM (complementary medicines) and pharmaceutical medicines.
5. Review with examples the mode of action of drug at the following protein targets (Bryant & Knights, 2015)
   - Carriers
   - Enzymes
   - Ion channels
   - Receptors (which are sub-divided into):
     1. Ligand-gated ion channels
     2. G-protein-coupled receptors
     3. Kinase-linked receptors
     4. Nuclear receptors
1.2 Are the statements below True or False. Review your Anatomy and Physiology or Biochemistry texts. Explain your answer and discuss it with your class / cohort during tutorial time or in an online discussion forum:

a) Fat-soluble drugs pass through membranes easier than other drugs.

b) Ionised drugs pass through membranes easier than other drugs.

c) Diffusion is the passive transfer of a drug from an area of higher concentration to lower concentration across a membrane.

d) Carrier-mediated transport enables small molecules to be carried from an area of higher concentration to lower concentration across a membrane.

e) Drug therapy is the safest and the most effective way of treating a health problem.

f) Drugs with a low therapeutic index are the most effective agents.

(g) Over-the-counter (OTC) medications are safer to administer than medications that require a prescription.

Bibliography