

**Faculty of Pharmacy**  
**Clinical Pharmacokinetics**

**Information :**

**Course Code :** PP 803

**Level :** Undergraduate

**Course Hours :** 3.00- Hours

**Department :** Pharm D

**Description :**

This course provides revision to basic principles of pharmacokinetics and their application to the clinical setting. Clinical pharmacokinetic equations and calculations Single Intravenous bolus and oral kinetics, IV infusion, multiple IV bolus, short infusion & oral dosing, non-linear pharmacokinetics, pharmacokinetic models. Sources of variability in pharmacokinetics, dosage regimen and dosage adjustment in children, obese, elderly patients, Renal and Hepatic Disease, Dialysis, Heart Failure. Dosage individualization of drugs of narrow therapeutic index (aminoglycosides, vancomycin, digoxin, phenytoin, etc). Therapeutic drug monitoring and pharmacogenomics approaches are applied.