Drug-nutrient interactions

Course No.	Title of Course	Credit Hours
HND-322	Drug-nutrient interactions	2(2-0)

Learning Outcomes:

- To raise the awareness of potential drug-nutrient interactions and influence on clinical outcomes
- To understand complex underlying mechanisms responsible for drug-nutrient interactions
- To identify factors that can promote drug-nutrient interactions and contribute to nutrition and/or therapeutic failure
- To integrate knowledge of pharmacology, nutrient-nutrient and drug-nutrient interactions into the nutrition care process

Theory:

Basic definitions and concepts: Role of nutrition therapy in pharmacotherapy; Pharmacologic aspects of food and drug interactions; Routes of drug administration; Pharmacodynamics; Pharmacokinetics, absorption, distribution, metabolism, elimination; Effects of food on drug therapy, drug absorption, drug distribution, drug metabolism and drug excretion; Effects of drugs on food and nutrition, nutrient absorption, metabolism and excretion; Effects of drugs on the nutritional status of patients e.g. taste, smell and type of intake; Enteral feeding: drug/nutrient interaction; Gastrointestinal effects, appetite changes; Nutrient assessment of drug-nutrient interactions; Dietary counselling for the prevention of food drug interactions.

Suggested Readings:

1. Boullata, J.I. and V.T. Armenti. 2010. Handbook of Drug-Nutrient Interactions, 2nd ed. Humana Press, New York, USA.
2. Mahan, L.K. and S. Escott-Stump. 2007. Krause's Food & Nutrition Therapy. Elsevier – Health Sciences Division. Philadelphia, USA.
3. McCabe-Sellers, B., E.H. Frankel and J.J. Wolfe. 2003. Handbook of Food-Drug Interactions, CRC Press, Taylor & Francis Group, Boca Raton, FL., USA.
4. Nelms, M.N. and K.P. Sucher. 2016. Nutrition Therapy and Pathophysiology, 3rd Ed. Cengage Learning, Belmont, CA, USA.