

# Course Overview



## Course Information

**Code:** PHG-310

**Title:** Basics of Natural Products

**Cr hr:** 2+1

**Level:** 6

**Program:** PharmD

**Co-requisites:** None

**Prerequisites:** PCH-201, PCH-202

## Course Description

This course introduces the importance of pharmacognosy as an applied branch of science. It shows the steps required for drug discovery from natural products as well as its quality control. It gives a detailed study of primary and secondary metabolites present in the plants, such as; carbohydrates, lipids, tannins, alkaloids, glycosides, and essential oils. Emphasis is given to the chemistry and uses of certain selected compounds from these classes and their biological sources.

## Topics

- Introduction and history of pharmacognosy
- Drug discovery from natural products
- Extraction of phytoconstituents
- Introduction to primary and secondary metabolites
- Carbohydrates
- Tannins
- Glycosides
- Alkaloids
- Volatile oils
- Quality control of natural products