

Course outline

SCI 405- Production of fine chemicals for Pharmaceuticals.

Course outcome

At the end of the course the student should have learnt that pharmaceuticals are made from petroleum products through organic synthesis, that they are extracts of natural substances such as herbs, they are natural products isolated from plants, fermented microorganisms and even animals.

Lecturer- Professor Jacob O Midiwo, Office, Chemistry building ground floor room G11, Telephone- 0722776682.

Lecture venue and hours- RM 119, Thursday 2-3PM and Friday 9-10AM.

Course Content summary.

Introduction to chemotherapy; use of natural products in medicine; source, extraction, isolation, activity, toxicity and commercial production of the following classes of compounds: antibiotics, alkaloids, sulphanilamides, glycosides, tannins, vitamins, hormones, essential oils, resins, antiseptics.

References:

Industrial Organic Chemicals Part III : Fine chemicals and pharmaceuticals , Raphael M. Munavu, 2011- Private publication but available in soft copy.

Papers from literature assigned during lectures.

Class notes.

Examinations

Course assessment tests (CAT)----- 30% marks.

Final examination-----70% marks.

Total-----100%

