

Natural Products Chemistry

- Natural products chemistry embraces many of the concepts and techniques as well as most of the fundamental knowledge that is common with medicinal chemistry. The distinguishing feature is that this area involves the study of natural products from plants, animals and microbes. The products may be therapeutically useful or toxic.
- Natural products chemistry endeavors to examine the natural source, mechanisms whereby the source biosynthetically constructs the product, processes whereby the product can be isolated from the source and techniques used to identify the product. These studies lay the ground work for the pharmacological evaluation of a potentially useful natural product or biochemical investigation of a natural toxin.
- A plan of study in natural products would emphasize courses in natural products and medicinal chemistry, chemistry, botany, and microbiology with support courses in pharmacology and pharmaceuticals.

Faculty with an interest in Natural Products Chemistry:

- Dr. Ronald A. Hill, Associate Professor of Medicinal Chemistry
- Dr. Khalid El Sayed, Assistant Professor of Medicinal Chemistry

Required Courses for Natural Products Chemistry

Chemistry 407 **OR** Chemistry 541 & 542

Pharmacy 409

Pharmacy 410

Pharmacy 566 and 568

Pharmacy 500

Pharmacy 531

Pharmacy 539

Pharmacy 552

Pharmacy 569

Pharmacy 599 **OR** Pharmacy 699

Instrumental Analysis

Medicinal Chemistry II

Medicinal Chemistry III

Advanced Medicinal Analysis

Molecular Structure & Function of Proteins

Synthetic Medicinals

Special Topics

Seminar

Concepts in Drug Design

Thesis Research/Dissertation Research