

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY  
HRT 125 - CHEMICALS IN HORTICULTURE (3 CR.)**

**Course Description**

Emphasizes basic chemical principles and their application to horticulture. Introduces principles of inorganic and organic chemicals. Studies chemical activities of insecticides, fungicides, herbicides, fertilizers, and growth regulators. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

**General Course Purpose**

This course should be taken near the beginning of the Horticulture Technology program to provide the student with a fundamental understanding of chemistry and horticultural chemicals. The course will provide a basic understanding of the principles of chemistry and how they may be encountered in horticulture.

**Course Prerequisites/Co-requisites**

Students should be able to read in English and should have strong computational skills.

**Course Objectives**

Upon completion of the course students should be able to:

- Understand the periodic table
- Read chemical symbols
- Write and balance simple chemical reactions
- Note the differences between organic and inorganic substances
- Understand how chemistry applies to horticulture

**Major Topics to be Included**

- a. Ethics of applying horticultural chemicals
- b. Types of horticultural chemicals
- c. Chemical principles
- d. Chemical reactions
- e. Organic versus inorganic compounds
- f. Safety when using horticultural chemicals