

# CHEMISTRY 466b

## 2002

### *The Evolution of Chemical Thought*

#### **Required Prerequisite Warning**

***Prerequisites for Chem 466b:*** Chemistry 351a and 353a or equivalent.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

**Instructor:** Mel Usselman, CB 072 [usselman@uwo.ca]

**Lectures:** 12:00-12:50pm, Mon, Wed, Fri in CB115

**Required Text:** The Evolution of Chemical Thought, P. deMayo & M.C. Usselman, UWO  
Available from Chem Stores

#### **Course Content:**

The course will explore the ways by which chemical knowledge is generated, accepted and transmitted. The historical development of fundamental chemical concepts will be studied, and the interplay of experimental data and human factors will be emphasized. Although chemistry will be analyzed in historical context, the conclusions drawn remain pertinent to modern chemistry.

The material scheduled to be covered (with approximate number of lectures) is:

Introduction	(2)
Composition	(3)
Atomism	(6)
Affinity	(3)
Bonding/Valence	(5)
Stereochemistry	(4)
Oxidation/Reduction	(4)
Thermodynamics	(4)
Vitalism/Abiogenesis	(4)

#### **Grade Assignment:**

2 term assignments 40%

in-class presentation 20%  
3 hr final exam 40%