

Course Code & Title : **CM8003 From Alchemy to Chemistry**

Academic Units : 3 AU

Pre-requisite : None

Course Description :

CM8003 From Alchemy to Chemistry

[Lectures: 39 hours; Pre-requisites: None; Academic Units: 3]

Learning Objective

To understand the development of chemistry from ancient times to the present day.

Content

The history of chemistry, both practical and theoretical, from ancient civilisations (Egypt, Greece, China) via Arabia and Medieval Europe to the modern science of chemistry, including the development of the chemical industry.

Course Outline

S/N	Topic	Lecture Hours
1	Chemistry in the Ancient World	3
2	Alchemy	3
3	The sceptical chemists; Chemistry becomes a science	6
4	The development of Organic Chemistry	6
5	The development of Inorganic Chemistry	6
6	The development of Physical Chemistry	3
7	The development of Analytical Chemistry	3
8	Structure and bonding from Lewis to Quantum mechanics	3
9	The emergence of biochemistry	3
10	The future of chemistry	3

Learning Outcome

Students will understand how chemistry developed from earliest times to its present state and will be aware of the directions in which it is now developing.

Student Assessment

Students will be assessed by:

a. Final 2-hour written examination (60%)

b. Continuous assessment (40%)

Textbooks/References

The Fontana History of Chemistry, William H. Brock