

The lectures will be illustrated by experiments, specimens, diagrams, and an extensive collection of models and physical apparatus.

The usual application of the science to manufactures, the arts, pharmacy, and medicine, will be made particularly prominent. The detection of poisons and adulterations, as well as testing in general, will also be fully considered.

(*Text Books*: Roscoe's Elements of Chemistry; Williamson's Chemistry; Lardner's Hand-book of Heat and Electricity, or Miller's Chemical Physics. *For Reference*: Fownes's or Naquet's Chemistry.)

#### Fourth Year.

##### APPLIED CHEMISTRY.

In this course the application of Chemistry to the Arts and Manufactures, and to the ordinary purposes of life, will be more fully entered into; as, for instance, glass-making, china and pottery, gas, sugar, calico-printing, dyeing, tanning, preservation and preparation of food, metallurgic processes, &c., &c.

The lectures will be illustrated by diagrams, models, and specimens of manufacture.

(*Books of Reference*: Knapp's Technology; Ure's and Tomlinson's Dictionary.)

##### ANALYTICAL CHEMISTRY.

In this short course, the preparation of pure reagents, the use of analytical apparatus, the detection of poisons, and the general process of qualitative analysis will be discussed.

(*Text-books*: Fresenius's or Noad's Qualitative Analysis; Croft's Course of Practical Chemistry.)