

School of Chemistry

Aims and Objectives: Session 2023-2024, Semester 1

Module CH1301: The Impact of Chemistry

Course Title: Chemistry against Crime

Duration: 7 hours

Lecturer: Professor S. E. M. Ashbrook

Aims: To introduce fundamental chemical aspects of forensic chemistry, to relate these to other areas and give a basic understanding of key analytical methods.

Objectives:

1. To understand the key techniques used in analytical chemistry and the significance and assessment of data.
2. To outline chemical and biological aspects of blood alcohol and to examine analytical methods for breath and blood alcohol analysis.
3. To examine the chemical structures and characteristics of illegal drugs, methods for their detection, and the use of performance enhancing drugs in sport.
4. To review the structures and characteristics of the main types of explosives, propellants and fire accelerants in common use.
5. To consider the origin of colour and the materials used for inks, paints and dyes, and the implications for forgery.