

**School of Chemistry**  
**Aims and Objectives: Session 2023-2024, Semester 1**

**Module CH1401: Introductory Inorganic and Physical  
Chemistry (Laboratory)**

**Duration:** 12 hours (4 x 3) of laboratory work. Additional self-study tasks, these include: pre-laboratory safety work and chemical calculation exercises.

**Staff:** Dr I. A. Smellie (Co-ordinator), Dr F. Grillo, Dr H. J. Mitchell, Dr A. Stasch and Dr P. Wheatley

**Aims:** The laboratory class consists of a series of experiments designed to be completed in one session. Post-laboratory assessments will focus on notable features of each task.. The course is designed to illustrate and reinforce concepts related to basic analytical techniques and observational skills. The skills acquired will be valuable for all students who advance to CH1601 and level 2000 laboratory courses.

**Objectives:** To perform four experiments that are intended as an introduction to basic observation skills and analytical techniques. Aspects of "Good Laboratory Practice" (GLP) and safety and chemical calculations relevant to laboratory work will be covered in self-study exercises.

**Introduction to analytical techniques:**

1. Separation and solubility exercise
2. Acid-base titrations with a selection of indicators
3. Analysis of group 2 carbonates
4. Introduction to chromatography