**THE SUSTAINABLE CHEMISTRY LABORATORY (PGCert RPD Domain C, 2 credits)†**

Staff: Dr Rabbab Oun/ Dr Alastair Wark/Dr Sebastian Sprick/Mr Jim Tweedie

Code: CH730

Structure: a: First Lecture information session

 b: Baseline laboratory audit or other sustainability study

c. Workshop attendance and presentation (2 credits total)
 Further development of sustainability projects (1-2 additional credits possible)

## Aim

This class will give students a basic understanding of sustainability issues relating to laboratories and provide the opportunity for them to carry out an assessment of their own research environment and contribute suggestions on reducing harmful impacts and improving the safety and sustainability of research activities.

## Content and Assessment

Part (a) Sustainability awareness

*Learning outcome: general appreciation of the potential environmental impact of chemistry labs*

Following an introductory lecture led by the Strathclyde Sustainability Team along with departmental staff, students will undertake an activity to assess the energy efficiency and energy usage of at least five different items of equipment in their own laboratory area. This will be followed by a workshop session where findings will be reviewed and ideas for improvement discussed.

Part (b) Sustainability practice

*Learning outcome: ability to conduct a baseline sustainability audit of a laboratory\**

Students (working either individually or in groups) will undertake a baseline sustainability audit of their own group’s research laboratory using the S-Lab Laboratory Environmental Assessment Framework. The aim is to identify and make some general recommendations on where there is scope to improve the sustainability of their own research laboratory. Options for other sustainability topics relevant to the university community could also be considered as an alternative.

Assessment

The class will be marked on a pass/fail basis based on attendance for both the first lecture and workshop. The expectation for providing the sustainability audit and presentation of information at the Workshop to complete the assessment will be discussed at the first lecture.

†It is expected that students will complete both parts of the class. However, exceptionally, partial credit may be awarded to those who complete part (a) but are unable to complete part (b) for good reason e.g. prolonged absence from the university etc.

\*PGR students undertaking theoretical chemistry projects will be offered an alternative e.g. the chance to audit their office environment.