

## **Laboratory Skills Course**

The School offers an in-house 1-day training course which covers many aspects of working within a laboratory (see below for details of course contents). Both theoretical and practical skills are covered which will enable users to improve their safe and effective use of chemicals, equipment, and protocols.

The course is generally held in March and August-to coincide with Honours students starting their projects. All new staff, PhD and Honours students are expected to attend the next available course. Existing staff and students are also encouraged to attend to update their knowledge.

Please contact Ginny Sargent ([Ginny.Sargent@anu.edu.au](mailto:Ginny.Sargent@anu.edu.au)) to put your/your students name down for the next course or to get a copy of the manual.

### **Course Contents**

#### SECTION 1. Hazardous Chemicals

Risk Management Strategies at the ANU

Risk Assessments

MSDS's (Material Safety Data Sheets)

International-Dangerous Goods Class Labels

Incompatible Dangerous Goods For Storage and Transport

European Community-Hazard Symbols

HAZCHEM Codes

American-National Fire Protection Association Hazard Ratings

The Schedule for Poisons and Drugs

European Community-Risk and Safety Phrases

Hazard Reduction

Personal Protective Equipment (PPE)

Chemwatch

Risk Assessment Form

In Case of Chemical Spill

#### **SECTION 2. WORKING IN A LABORATORY**

General Laboratory Guidelines and Safety Information

Housekeeping

Safe Handling Guides

Heat of Reaction  
Electrical Safety  
In Case of Chemical Spill  
Planning Lab Work  
Experimental Design  
Avoiding DNA/PCR Product Contamination  
Calculations  
Preparing Solutions  
    Weighing Chemicals  
    Labelling  
Waste Disposal

## **LABORATORY EQUIPMENT**

Pipettors  
Gel Doc  
Genequant (Spectrophotometer)  
pH Meter  
Fume Hood  
Hot Room – for Radioactive labelling  
UV Transilluminator Room  
Autoclave  
Purified Water Systems  
Centrifuges

## **EXPERIMENTAL TECHNIQUES**

Electrophoresis  
DNA Extraction  
Polymerase Chain Reaction  
DNA Sequencing

Resources  
Acknowledgements