

MODULE DESCRIPTOR

Module Title

Practical Skills for Life Sciences

Reference	AS1903	Version	3
Created	August 2021	SCQF Level	SCQF 7
Approved	May 2011	SCQF Points	15
Amended	August 2021	ECTS Points	7.5

Aims of Module

To train students in laboratory safety and the basic manipulative skills associated with laboratory work appropriate to their course of study. To enable the accurate recording of experimental procedures, observations, calculations and conclusions.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Carry out prescribed experiments accurately and safely.
- 2 Record experimental observations and results in a meaningful and accurate manner.
- 3 Perform appropriate calculations and form appropriate conclusions from experimental results.

Indicative Module Content

Fundamental principles of solution chemistry, concentrations, solutions and dilutions. Accurate use of balances and pipettes. Correct and safe use of centrifuges. Titrations. Light microscopy, paper and thin layer chromatography, visible spectrometry.

Module Delivery

This is a laboratory based module supported by tutorials and on-line exercises.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	40	N/A
Non-Contact Hours	110	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type: Coursework Weighting: 50% Outcomes Assessed: 2, 3
 Description: Online pre-laboratory exercises and written laboratory reports.

Component 2

Type: Practical Exam Weighting: 50% Outcomes Assessed: 1
 Description: Skills test.

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

The first grade represents Component 1 (CW1) equally weighted with the second, Component 2 (PE1). A minimum module grade of D is required to pass, with compensation of grade E in Component 1 or Component 2 permitted. Non-submission of either component will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
A	AA, AB, BA
B	AC, AD, BB, BC, CA, CB, DA
C	AE, BD, BE, CC, CD, DB, DC, EA, EB
D	CE, DD, DE, EC, ED
E	AF, BF, CF, DF, EE, EF, FA, FB, FC, FD, FE
F	FF
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None, in addition to course entry requirements.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 *Laboratory Practice and Data Handling Manual*, School of Pharmacy & Life Sciences, Robert Gordon University. Current Issue.
- 2 LANGFORD, A., DEAN, J.R., REED, R., HOLMES, D., WEYERS, J. and JONES, A., *Practical Skills in Forensic Science*. Current Edition. Pearson Education Ltd.
- 3 REED, R.H., HOLMES, D., WEYERS, J. and JONES, A., *Practical Skills in Biomolecular Sciences*. Current Edition. Pearson Education Ltd.