

Feedback & Marks - <http://www.l4labs.soton.ac.uk/general/fb.htm>

Feedback is an important aspect of your lab work, and it is important that you make full use of it in order to improve your work. You can expect:

- Automated feedback on pre-lab quizzes - Immediately on taking the quiz.
- Verbal feedback on practical performance - During your laboratory sessions.
- Verbal feedback on interim reports and lab-book - When submitted for assessment.
- Online feedback on your main report - Identifying the strengths and weaknesses of the report. The majority of the focus of the remainder of this page will be on the online report feedback aspects of feedback.

To access online feedback: (1) Log on to the appropriate Blackboard course; (2) Navigate to the *Turnitin* link where the work was submitted; (3) Click on the "View/Complete" option; (4) Click on the "View" button (next to "Submit"). When the report appears make sure that "GradeMark" (top left) has been selected. Note: When viewing the feedback you will also see the mark for that work (although for late submitted reports it will not reflect the mark reduction for late submission). A full record of all grades related to the L4 practical work is available on the Level 4 Lab website (<http://www.l4labs.soton.ac.uk/protected/marks/marks.htm>).

Session attended.	Course: Practical	Component Marks (/10)					Total (%)	Class Average (%)	
		Attendance	Report Submission	Pre-lab	In-lab Assessment	Results Quality			Report
	CHEM1000: Redox Reactions	✓	✓	8	8	0	0	80	63
	CHEM1001: Isolation of DNA	✗	✗	0	0	0	0	0	62
	CHEM1002: P-Block Chemistry	✓	⊗	5	10	6	4	68	59
	CHEM1004: Spectroscopy	-	✓	-	-	-	8	84	68
	CHEM1005: Acid-Base Reactions	✓	✗	10	8	0	0	34	56
	Your Average mark*			6	7	2	3	47	
	<i>Average Mark* for entire Class</i>			6	8	5	6	61	

Unauthorised absence - contact the lab manager immediately. See the L4 website for information on validating an absence.

Report submitted X days late. 10% of mark lost for each day i.e. 30% lost in this case.

Authorised absence or not scheduled to perform practical – will not affect progression.

Report submitted >5 days late, or not at all. Report mark of 0 received.

This component is not assessed for this practical.

No grade information available.

Shaded pink, based on an incomplete set of marks for this practical.

Queries about report feedback (including if it fails to appear in a timely fashion) should be directed to the Level 4 Lab Manager (C.M.Flowers@soton.ac.uk).

COMMUNICATIONS – LEVEL 4 LAB

Lab Book - <http://www.l4labs.soton.ac.uk/tutorials/comm/comm.htm>

General guidelines:

- Each new experiment must start on a new page and begin with an **informative title, name, and date** (day, month and year).
- Write in permanent pen and cross through any mistakes neatly.
- Write the lab book as you perform the experiment.
- NEVER use scraps of paper or the practical script in place of your lab book.
- ALWAYS write your lab book in full, whether it is assessed or not. You will need it for writing your report. Note that even if not due to be assessed for a particular practical, your lab-book can be shown to the Lab Manager who will provide you with feedback on it.

What to include:

- **EXPERIMENTAL PROCEDURE:** This is a description of the method, such that another chemist could perform the experiment using only what you have written. Write in third person and past tense, in either bullet points or prose. Record the settings used on any instruments, but not the operating instructions.
- **RESULTS:** Record the **exact quantities you used**, and **your observations** (- ensure you note everything that may be important/relevant). Organise these neatly, in a table where appropriate. Data must include the "raw" measurements with **units**. Where data is saved electronically, the **filename and location** should be listed; it should also be clear **what data is contained in the file**. **Results must NOT be plagiarised**. If working in a pair - ensure your partners results/procedures are clearly referenced.
- **ERRORS:** For **Stable Digital Displays** – Include the **Reading Error** (i.e. $\pm \frac{1}{2}$ Resolution) or the Resolution. For **Fluctuating Digital Displays** – Include the **Range of Fluctuations**. For **Graduated Volumetric Glassware** – Include the **Manufacturers Error** and the **Fill Error**. For **Single Fill Volumetric Glassware** – Include the **Manufacturers Error**, the **Estimated Internal Diameter** (of the vessel at the fill line) and the **Estimated Maximum Distance** of the liquid level from the fill line.

What not to include:

- **Risk Assessment, Conclusion or Interim Report.**
A "Risk Assessment" and "Conclusion" may be needed for the Level 5 Lab-book, but they are NOT needed for the Level 4 Lab-book. However if they included in the Level 4 Lab-book there will be no penalty.

Lab report (Full) - <http://www.l4labs.soton.ac.uk/tutorials/comm/comm2.htm>

General guidelines:

- Include a header with the **your name, university username** and **ID number**. Optionally you can also include a page number and your e-mail address.
- Pay attention to plot presentation, e.g. informative title, axis titles divided by units, appropriately rescaled, using markers when plotting few data and lines without markers when plotting numerous data (e.g. spectra).

What to include:

- **TITLE and DATE.** AIM: A single sentence stating the goal of the practical.
- **INTRODUCTION:** A summary of the theory aspects of the practical, and the experiment to be performed. This should be no more than a couple of paragraphs long, but not copied directly from the script.
- **EXPERIMENTAL PROCEDURE:** A concise account of the methods used in the practical, written as prose in third person past tense (and not bullet points) . For example if the lab manual reads:

In a 10 mL beaker dissolve ~0.25 g copper(II) sulphate pentahydrate in 5 mL water. Using a Pasteur pipette add 50% NH₃ solution to water until the intense colour of the copper ammonium complex is evident.

You might write:

Cu(SO₄)₂·5H₂O (0.246 ± 0.001 g) was dissolved in 5.0 ± 0.1 mL water giving a blue solution. 50% NH₃ (aq) was added drop-wise to the solution. After addition of ~2 mL of NH₃ (aq) the solution had formed a dark blue copper ammonium complex.

- **RESULTS & DISCUSSION:** Begin this section by presenting all of your raw data, and including any relevant plots or spectra. Answer the questions in the 'Analysis and questions' section of the lab script here. Phrase answers so the reader doesn't need to know the question to understand what you have written.
- **CONCLUSION & RECOMMENDATIONS:** The conclusion should first state whether the aim of the practical was achieved. Key findings, results or values should also be cited. Follow this with recommendations on how the experiment and/or results could be improved, assuming full access to lab equipment.
- **APPENDIX:** Use the appendix to give a sample of each type of calculation performed. If a calculation is repeated with different values, you only need to give one example. For each sample calculation include the working details, and include unit and error treatment. Include in the Appendix examples of data analysis results tables.

Important: The "Aim", "Introduction" and "Experimental Details" (together) must not take up more than one page - There may be a mark reduction if this limit is exceeded.

Assessment

Lab grades contribute 25% towards their respective core module grades in Years 1 and 2. **Progression to the next part of the course is dependent on attending all lab sessions**, with the exception of validated absences, **and achieving an overall lab grade of at least 40%**.

For each L4 practical up to four components will contribute to your grade:

- **PRE-LAB:** This will commonly include many elements that need to be completed. It is usually assessed through a quiz. It always includes the requirement to read the script.
- **IN-LAB ASSESSMENT:** This portion of your grade comes from one of three pieces of work (which must be completed or submitted during the lab session). The experiment script will define which assessment will be applicable to that practical. The three options are:
 - **INTERIM or IN-LAB REPORT** – A short report comprising a few questions from the main report, assessed by a demonstrator in the lab.
 - **LAB BOOK** – An assessment of the quality of your lab notes.
 - **PRESENTATION** – A presentation of a specified portion of your results and understanding of the theory to lab demonstrators; usually performed in a group.
- **RESULTS & PERFORMANCE:** An assessment of the quality and quantity of results you obtained in the lab, assessed from sample submission and/or results provided in your report. This mark can be adversely affected by failure to follow safety guidelines or by poor experimental performance in the lab.
- **REPORT:** This will either be a full report or a short report, depending on the experiment you perform. Check the script for exact requirements. A full report must contain all sections detailed on this document, while a short report will generally only require a results and discussion section, with an appendix where appropriate. Reports must be submitted via *Turnitin* by 23:59 the day before your next practical in Year 1 (e.g. 23:59 Sunday for Monday groups) and by 23:59 two days before your next practical in Year 2 (e.g. 23:59 Tuesday for Thursday groups).

Mark allocation is unique to each practical. The breakdown of this is given in the form of a pie chart in the "Marks, deadlines and feedback on performance" section of the script.

