

Birzeit University

Biology and Biochemistry Dept.



How write a good report



Are you dreaming of an 9/10 mark or even 9.5/10 mark on a report? It is very important to listen to your TA or your instructor of the lab to know and understand how to write a lab report. Therefore; if you have any questions, ask your TA any questions you want to know about lab reports or about the experiment. She/he is there to help and assist you. **So, please do not be shy or afraid to ask.**

The information needed of writing a good lab report will be presented. The most **important** thing in a lab report is to start with it as soon as you do the experiment to have enough time to write a good report with fresh information and have time to look up information.

A good report is **not** measured by the amount of papers you print out or the length of the paragraphs you write. A good report has neat pages with good information needed without repeating the same ideas with no mistakes in vocabulary or grammar. Now, tips will be given to start a good lab report.

Cover page:

This is important to show what this lab report is about and for what course it is.

<p>Birzeit University</p> <p>Biology and Biochemistry Department</p> <p>Name of the laboratory you are taking</p> <p>Experiment title</p> <p>Your name and ID</p> <p>Partners name and ID (if you worked within a group)</p> <p>Name of your lab instructor (Dr./Ms./Mr. Smith Smith)</p> <p>Teacher assistant (Ms./Mr. Smith Smith)</p> <p>Date and day of experiment</p> <p>Date and day of report submission</p>

On a new page, write the experiment title again.

(REMEMBER: USE SIZE 12 AND TIMES NEW ROMAN FOR THE FONT)

***Objectives:**

You should write a small summary of **why** you are performing this experiment in passive voice and nicely written in a paragraph. You should include names of tests performed if there is. Example: (Determination of the presence of a polymer carbohydrate by IKI test).

If there is more than one experiment in the same lab or more than one test in the same lab, you should include each test's objectives including the general objective.

***Introduction:**

The introduction is **not** evaluated by its length. What is evaluated in the introduction is the general idea of the experiment and **not the explanation of your results**. If you include new information, you should cite that information. The steps for citing information is going to be mentioned in the discussion section.

It should be written in paragraphs with a general introduction and an informative body. You could get an idea of what to write from your lab manual if you want. In the end of the introduction, it is a good idea to write a small sentence of what you are going to do generally as a conclusion.

DO NOT EVER copy and paste information from the internet, lab manual or another report or you will face a big zero and a big punishment. تعتبر سرقة أكاديمية يكتب في ملفاتكم

***Chemical Reactions:** (if there is a reaction in the experiment)

Put the name of the reaction, **if there is**, and write the correct and balanced form of the reaction.

***Materials and Methods:**

The methods should be specific and detailed that would let anyone do the exact same procedure as you did by reading your methods. You must write everything in paragraphs **and not** steps (as in 1,2,3). The form of the paragraphs should be in **passive voice and not (I did, we put, I weighed, the teacher did)!**

You must ask your TA whether he/she wants you to write the materials and methods together or separately. Sometimes, the TA wants you to write the methods

and include the materials within. For example: (1g of NaOH were weighed and added to a beaker containing 20 ml of 2M HCl)

***Data and Results:**

It is appropriate to write a short introductory paragraph of what the data is about and what they represent in general.

Your data and results can be expressed by **paragraphs, graphs, tables** or even **pictures**.

Here is how tables and figures should be presented:

Tables:

- Naming and description should be on **top** of the table. (Table 1, Table 2, etc.)
- It is very important to put the **units** in the tables or figures.
- For example:

Table 1: (Write a **short description** of the table here. **DO NOT** discuss it here; because you will do so in the discussion)

Time (min.)	Absorbance (A540nm)
10	0.48
20	0.44
30	0.34
40	0.28

Figures, graphs and pictures:

- Naming and description is **below** the graph or picture. (Figure 1, Figure 2,etc.)
- It is very important to put the **units** in the tables or figures, and **label** photos if there are certain things to point out.
- For example:

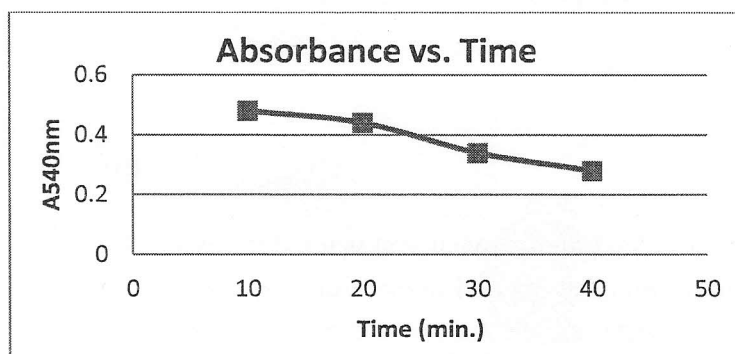


Figure1: (You must write a **short description** of the table. **DO NOT** discuss it here; because you will do so in the discussion)

*Discussion:

Here, you must discuss your results:

- Start with a small paragraph as an introduction.
- All in neat paragraphs, passive voice.
- Sometimes, it is necessary to discuss why some chemicals or compounds or methods are used or necessary in the experiment. If **change in colors** were observed, discuss them.
- Discuss your tables and figures. Say why there was an increase or decrease- if they are- in numbers or absorbance, activity and/or explain what is resulted in pictures. (How, what, why ...?)
- You could mention information you summarized from a paper from the internet, however; citation is needed. There are 2 ways you can cite your information. You can cite by numbering or by inserting the **last name** of the writer and the **year** it was published after the paragraph.

You then enter or right down the **whole bibliography in the reference section** (Look below in the references). **DO NOT COPY AND PASTE.**

For example;

Temperature affects blood flow in the human body. High temperatures increase blood flow, while lower temperature tend to decrease the flow. (Barcroft & Edholm, 1943)

OR:

Temperature affects blood flow in the human body. High temperatures increase blood flow, while lower temperature tend to decrease the flow.¹

- Mention the errors if they are present, explain where they might have come from and what should be done to avoid it.

*Conclusion:

Summarize what you concluded (answer what you wanted to test) in a paragraph, and if it was successful or not. It is good to mention (depends on your experiment) what further things you should do to improve the experiment or what further research and analysis could be done after you achieve the results.

***References:**

If you have taken information from a good reference, you should mention the details of the paper or website in this section of the report (**bibliography**). **References are best taken from “scholar.google.com” as the search engine.**

All references should be in APA style 5th or 6th edition in Birzeit University. For example:

Barcroft, H., & Edholm, O. G. (1943). The effect of temperature on blood flow and deep temperature in the human forearm. *The Journal of physiology*, 102(1), 5-20.

You could use Mendely that is really helpful in referencing. You can watch YouTube videos on how you use it.

-Website referencing in 5th edition is like this:

Name or names of writers, (year of publication), Title of the paper, Retrieved at (date you took this information), from (write down the whole URL/website you took from)

***Appendix:**

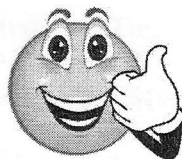
(This does not always have to be included in a report, but it is needed in the following cases):

-If you used any calculations, write down the formula and include one example.

-If the TA or instructor gave you questions to answer, answer them here.

-If you have any notes or comments to add about the experiment.

Prepared by: Amira Abdullah



Good Luck