Inserting Special Symbols and Formatting

Use Insert | Symbols... to insert special symbols in word documents. For example, here is the lower case Greek letter alpha, α . I expect you to be able to use ^{superscripts} and _{subscripts} in your documents. You do this by selecting the text and the selection Home | X_2 or X^2 (or by right clicking on the selected text and choosing Font...). Also number your pages using Insert | Page Numbers....

Inserting Graphics

Inserting graphics (figures) into documents can be problematic due to the need to keep captions on the same page as the image. In general, all inserted graphics should be labeled (as in Figure 1) and include a meaningful caption. The unfortunate reality is that the figures and captions may be the only part of your document that people really look at.

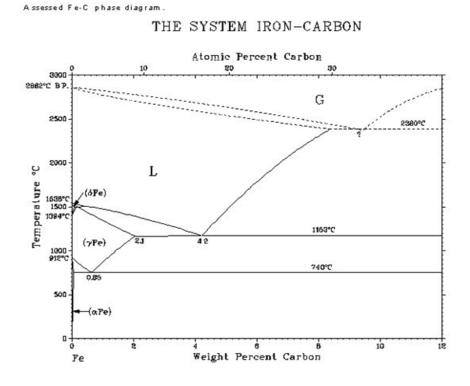


Figure 1: The Fe-C phase diagram is useful in the study of biomaterials.

Figure 1 was inserted using Insert | Picture | The caption was added by right clicking on the figure and selecting Caption.... As the last step in formatting your documents, you may have to resize and move figures or use Insert | Page Break to assure proper page breaks.

Literature Citations (References)

It is very important that you cite the source of material you incorporate into your reports. In technical and scientific documents, this is typically done using endnotes. As the name implies, endnotes appear at the end of your document. I'll let the General Studies Department teach about the details of citing and formatting sources. I do not require that you use a particular style (like APA).

What is important is that you provide enough information that a reader of your paper can locate your source. Also, you **don't** have to provide sources for "general information." I consider general information to be any information that commonly known be anyone with your educational background. For example, that fact that there are 1000 mm in a meter would not require a source reference. On the other hand, the fact that there are about 30 complement proteins would need to be sited in your work (but not necessarily in a paper by and biochemistry graduate student). In my opinion, if you can find the same information in multiple, readily available sources and/or if it's something that most of your classmates would know if you asked them about it you would generally not have to cite its source.

While Word 2007 can number and manage endnotes automatically, I find it formatting conventions inconsistent with those used for literature citations in some scholarly documents (like MSOE Masters theses). Therefore, I generally manage my citations and endnotes manually by inserting superscript reference digits in the body text and entering the citation text myself at the end of the document as I have done here¹. The alternative is to use References | Insert Endnote.

Inserting Equations

Use the MathType add-in to insert equations into your documents. Before MathType is available, you must install it. See my "Installing MathType Word add-in instructions for more information. Here is a sample inline equation $J = -D \frac{dC_m}{dx}$ that predicts the mass flux in a solid medium.

The following is a display equation³...

$$\frac{C - C_1}{C_0 - C_1} \cong 1 - \exp\left(-\frac{4D\pi^2 t}{R^2}\right)$$

that predicts the rate of change of concentration of a gas component in an alveolus (a subunit of the lung).

Both of these equations were added to the document using MathType menu bar selections accessible using Add-Ins | MathType.

Sources (or References)

- 1. This is a dummy citation provided as an example. The examples below are actual citations.
- 2. Bennett, C. O. and J. E. Myers. Momentum, Heat and Mass Transfer, 3rd ed. McGraw-Hill 1982.
- 3. Cooney, D. O. Biomedical Engineering Principles An Introduction to Fluid, Heat and Mass Transport Processes. Marcel Dekker 1976.