

# Instructions and advice to the author of thesis work, PM, home exams, lab reports, literature work or similar at courses within EMG

## Part II - Format

### 1 General information

#### 1.1 To whom do these instructions apply

These instructions apply for all written assignments that are handed in at the Department of Ecology and Environmental Science (EMG) if nothing else has been explicitly stated by the supervising teacher or course coordinator. The instructions are divided into three parts, and this second part covers the format of the text you are writing. A checklist used for peer-review, done by a fellow student before your assignment is handed in, is also attached to these instructions.

### 2 Text format

#### 2.1 Text layout

Times New Roman is used in all reports to achieve a uniform appearance. The body text is to be written in a 12 pt font size and in one column with a line spacing of one (1). Leave a 2,5 cm margin on both sides and at the top and the bottom of each page. The text may be written left justified or with a flush right margin. Center the page numbering at the bottom of the page in the same font as the body text (Times New Roman, 12 pt). To make the page numbering start a few pages into the document, a section break may be added and then start the page numbering from there. Section breaks are added for each appendix. This is usually done in the toolbar menu through "Insert". There is also information in the help function in Word regarding how this is done.

- **Title:** Times New Roman, bold. Font size is adjusted based on the length of the title.
- **1 Header 1:** Times New Roman, 16 pt, bold. Numbered 1, 2, 3... and so on. Leave a blank line before the following paragraph.
- **1.1 Header 2:** Times New Roman, 14 pt, bold. In chapter 1, header 2 is numbered as 1.1, 1.2, 1.3... and so on. No blank line is to be added between header 2 and the following paragraph.
- **1.1.1 Header 3:** Times New Roman, 12 pt, bold. In subchapter 1.1, header 3 is numbered 1.1.1, 1.1.2, 1.1.3... and so on. No blank line is to be added between header 2 and the following paragraph.
- Text body, or running text: Times New Roman, 12 pt.
- Table and figure text: Times New Roman, 11 pt.

#### 2.2 Paragraphs and chapters

A maximum of three levels of chapters and subchapters should be used. If you wish to use more levels, you must speak to your supervising teacher or course coordinator in advance. The chapter headers and subchapter headers are numbered, but a possible abstract is not. Make sure not to overuse paragraph and chapter division. A paragraph should include at least three sentences, or five to six rows of text, and each chapter should include a substantial amount of text.

Leave an empty row between a paragraph and a subchapter, and two empty rows between main chapters, similarly to how this document has been formatted. Please observe that you can set an automatic space between paragraphs in Word. As a default setting, this space is usually set to 6 pt. Set it to zero and use the linefeed (Enter) to achieve a fitting space between paragraphs and chapters. A pointer here is to activate the function "display format marks", which is done by clicking the "¶" icon in the toolbar.

### 2.3 Page numbering

The page numbers should be placed at the bottom of the page, in Times New Roman 12 pt, and be centered. The page numbering starts from the introduction, and the introduction should always be placed on a page to the right. To make the page numbering start a few pages into the document, a section break may be added and then start the page numbering from there. Section breaks are added for each appendix. This is usually done in the toolbar menu through "Insert". There is also information in the help function in Word regarding how this is done.

### 2.4 Numbers and units

In the running text, numbers from zero to nine are generally written with letters, while numbers above 10 are written with numbers. However, this does not always apply. For measurement values in which a number is provided, e.g., 1 mg L<sup>-1</sup>, and figures containing decimals, e.g., 3.4, numbers are used. In cases where you use mathematical symbols, e.g., >, <, or -, numbers are also used even if the number is lower than 10. If you choose to write the meaning of the symbols in plain language, the numbers should be written in letters, e.g., "less than five", or "between two and three". The rule regarding spelling out numbers does not apply to the numbering of figures and tables. Concerning numbers, it is also good to keep in mind the difference between Swedish and English regarding decimal dividers. Swedish uses a comma (,), while English uses a period (.). The precision with which your results should be presented is determined by the precision of your analyses. If the analysis has an uncertainty of ± 1 mg L<sup>-1</sup>, it is not reasonable to state the results with a greater precision, meaning 3, 5 and 9 mg L<sup>-1</sup> not 3.23, 5.3, and 8.9 mg L<sup>-1</sup>. In cases where you have done calculations where the input values have a different number of significant digits, it is the value with the lowest number of significant digits that decides. When you have calculated the mean of the values 3, 4, and 6 µg g<sup>-1</sup>, this is stated as 4, and not as 4.3, 4.333, or 4.3333333333 µg g<sup>-1</sup>.

Usually, SI units are always used, e.g., meter (m), and gram (g). However, keep in mind that SI units always are combined with a prefix. In other words, µm, mm, and km are also SI units. Units for concentration may be written as either µg/L or µg L<sup>-1</sup>. Liters are designated with a capitalized L instead of a lower-case l to avoid confusion with the number one. When concentrations are presented as a percentage, permille, or parts per million, it sometimes may need a to be specified if the concentration has been calculated based on weight or volume, e.g., 20% (weight), or 15% (vol.). In addition, there are situations where units other than the traditional SI units are used, e.g., atmospheres (atm) are often used as a unit for pressure even

though the SI unit is pascal (Pa). In equations, other units than SI units may need to be used to reach the correct result.

## 2.5 Figures and tables

For a result can be summarized in a sentence, figures are often redundant, though in cases where the results include several levels or categories, a figure or table is often preferable to improve comprehensibility. Put in a serious effort when it comes to making figures and tables correct, easily comprehensible and readable. Make sure units are stated on x- and y-axes. Also, consider when figures and tables should be used, as well as which type of figure is most suited when it comes to visualizing your results. Feel free to use color if this is needed to allow a figure or image to display data in a clear and easily readable manner. However, it is important that you always combine the colors with different types of symbols to allow for reading in grey-scale and by colorblind readers.

Additionally, you should make sure the number of figures is reasonable in regard to the length of the report. In a report consisting of two to three pages, a maximum of two to three figures/tables is appropriate, and in a degree project consisting of 10-15 pages, it is appropriate to include five to six figures/tables. However, there is no requirement regarding the inclusion of figures/tables. Keep in mind that if you have several figures that are fundamentally connected, these may be joined to one figure where you name the different parts 5a, 5b and so on. Also, keep in mind that if your report is to be published, you may only use figures from books, the internet, or from similar sources, with the permission of the author/creator.

All figures and tables must be referenced in the text, and that must be numbered based on the order they are referenced in the text. References to figures is virtually always done in parentheses in the end of the sentence, meaning (Fig. 1) or (Table 1). Figures should always have a figure text which is placed under the figure and begun with Figure X, and tables should always have a table header which is placed above the table and begun with Table X. Figure texts and table headers should be written to allow the reader to understand what the figure or table displays without scanning for information in the running text. They should also include information regarding what abbreviations, different fonts, symbols, and lines mean, and which level of significance that has been used, e.g., for correlations or T-tests.

Observe that a figure text should explain what is seen in the figure, concretely. Do NOT use terms like "In this figure one can see how perch grow etc.". The figure text should NOT explain the result or be an interpretation of what the figure shows. "Figure 1. Perch spawn grow better at good supply to food" is consequently an incorrect figure text.

## 2.6 Maps

Maps are a type of figure, and you refer to them exactly like to other types of figures (Fig. X). Maps are drawn with a North arrow and, if needed for comprehension, tick marks. An explanation of symbols should be included on the map or in the figure text if it is not abundantly clear what the symbols signify. All geographical locations that are mentioned in the running text should normally be included in the map. All symbols on the map should be included in the explanation of symbols, and everything in the explanation of symbols should be included on the map. In the figure text, it should be made clear where the base material for the map is from. Observe that you should refer to the person/agency/corporation that has created the map, and not where you have found it. This means that you, generally, should reference topographical maps to the National Ordnance Survey, and bedrock or soil type maps to SGU and not to SLU's

service for downloading digital map material. The National Ordnance Survey and SGU have good services for generating maps of high quality online. If possible, use these services instead of using finished maps from the internet.

## 2.7 Terms and abbreviations

Terms or abbreviations should virtually always be explained the first time they are used. This also applies to quite commonly accepted terms like TOC (total organic carbon), DOC (dissolved organic carbon), and DIC (dissolved inorganic carbon). Either, the abbreviation is written in the running text, like the examples above, or the complete term is written in the running text and the abbreviation is written in parentheses. For some commonly accepted, no explanation is needed. Though, this only applies to terms where the abbreviation has replaced the term completely in daily speech. An example of this is DNA, where most people know what the abbreviation means, but will be confused if you say deoxyribonucleic acid. Be consistent in your use of abbreviations.

Regarding abbreviations that are specific to your study, e.g., different designations for different analyses, sample objects, or sample groups, consider if the abbreviations help the reader or not. If the abbreviation is not self-explanatory, it is often better to write the whole term even though this is more space consuming. Otherwise, there is a risk that the reader must search for what the abbreviation means in the method section each time the abbreviation appears. It is good to keep in mind that the reader might not read your report from start to finish. The discussion may be the first thing the reader reads. Therefore, it is good to explain all abbreviations that are not commonly accepted or specific to your study in the discussion as well.

## 2.8 Equations

Equations are placed on a separate row and numbered. The equation, and variables, should be written in *italics*, both in the equation itself and in the running text. All variables should be explained in the text (see below) and the unit used in the calculations should always be stated. Mainly use SI units, but in some cases a specific equation demands the use of different units. The following is an example where the Chemical Index of Alteration (CIA) has been calculated with the ensuing equation,

$$\text{Eq. 1} \quad CIA = \frac{Al_2O_3}{CaO + Na_2O + K_2O}$$

where  $Al_2O_3$  represents the concentration of aluminum oxide (percentage of weight),  $CaO$  is the concentration of calcium oxide (percentage of weight),  $Na_2O$  is the concentration of sodium oxide (percentage of weight), and  $K_2O$  is the concentration of potassium oxide (percentage of weight). The equation is later references as Equation 1 or (Equation 1). There is a special tool in Word to assist in writing equations, which you can find under "Insert". This tool can help you to write fraction bars, exponents, etc. in a correct manner.

## 2.9 Footnotes

Footnotes may be used in exceptions, though only to clarify or comment something in the text, and not to make references. References are made using the Harvard system, see part 3 of the instructions.



### **3 Format of the submitted report**

When your report is finished it is to be handed in. This may be done in different ways, depending on what way the examining teacher manages your report. Generally, you should either submit the report as a .docx (alt. .doc) or a .pdf file, but NEVER as an .odt file. In addition, the submission is usually done either to a submission folder on Cambro/Canvas, or as an e-mail to the teacher. If the report is to be submitted via e-mail, it should always be sent as an attachment, and NEVER through Google Docs, Microsoft Onedrive, or any similar cloud-based service. Regardless of how the teacher of your specific course wants you to submit the report, it is extremely important that you follow these instructions and that you submit the document in the specified format. It is also important that the file name always includes your name, course, and which submission date your report belongs to. For example, a report written for the course on climate change, the file name would be Student Name-ClimateChange-1 the first submission date.