Guidelines on Writing a Master's Thesis

In order to achieve uniformity, postgraduate Thesis must include: a) cover page, b) title page, c) acknowledgements page (optional), d) contents page, e) **body of the Thesis**, f) appendices. Formatting requirements are as follows: A4 paper size, justified alignment, 12 pt. *Times New Roman* font, text 1.5 cm. spaced, double spacing between paragraphs, margins set at 2 cm. top, bottom and right, and at 2.5 cm. left. It is suggested that Theses should be structured with Chapters or include Chapters. Chapters and sub-chapters should be numbered in Arabic numbers e.g. 1.1., 1.2. or 1.1.1., 1.2.1., 1.2.2. etc.

The **body of the Thesis** must include the following sections:

i) Abstract (both in English and in Greek) and keywords
ii) Literature Review
iii) Methodology
iv) Statistical Analysis
v) Findings
vi) Conclusions – Discussion
vii) Bibliography
viii) Appendices

i) **Abstract**

It gives a short and informative summary of study design, conduct and findings of the Thesis. Abstract should be structured in the following sections: Introduction and Aim, Materials and Methods, Results, Conclusions. It is recommended not to exceed 500 words.

Keywords: After the Abstract, list up to 5 keywords. These should represent international lexicographical terms. For medical-biological sciences the Index Medicus and IATROTEK (MeSH-Hellas-Biomedicine Terminology) in Greek should be used.

ii) **Literature Review**

This section presents in a systematic way the scientific literature on the subject area of the Thesis.The student gives an overview of the subject area and of the specific issue under consideration and identifies research needs, thus justifying why the specific topic was chosen and how the thesis is important

Aim: This paragraph should state the research gaps in the literature and then the research hypotheses and specific objectives that are the subject of the Thesis.

iii) **Methodology**

It describes in detail the research method and procedure and, in particular, the way the sample was selected, the intervention program, the instruments, the data collection methodology and the activity timetable. It is recommended to divide this section into individual sub-sections:

- Research design: It is described whether it is laboratory research, epidemiological observational study, double-blind, randomized intervention study, or meta-analysis, the place and time period. In addition, it should be made a clear determination of all outcomes, exposures, predictors, and if necessary, diagnostic criteria.
- Research sample: It is described in detail the subjects of the study (study in humans, study in experimental animals, in vitro study) and the sample size, the sampling method (e.g. random, stratified, clusters, non-systematic sampling), the way of selecting samples (inclusion and exclusion criteria), the participation rate (if the study conducts in humans), the data collection methods (personal interview, self-report, by phone calls, etc.), as well as the timeline of the study.
- Measurable characteristics: Detailed chemical and/or biochemical processes, clinical examination, molecular genetic analyses, use of bioinformatics programs, as well as the questionnaires used (with the respective licenses), and a list of the references of the methodology and details regarding the methods and tools used.
- Bioethics: It is stated that the research was conducted based on the principles of Bioethics for humans and animals, as defined by the National Bioethics Committee and Greek legislation. In cases of research in humans, it must be specified that the study is in accordance with the Declaration of Helsinki (1989) and that the participants had been informed about the purposes of the study and giving writing consent to their participation in the study. This section also states any conflict of interest that may have existed during the study.

iv) **Statistical Analysis**

Here the student outlines the methodology used in the statistical data analysis. If required by the project design, power calculation is also described here.

v) **Findings**

This section clearly and explicitly presents the findings from the research data process. Findings are not commented upon here. Results are presented in the form of tables, graphs and/or through a description.

For example, in studies conducted in humans, the number of participants at each stage of the study (number of potentially selected, screened for eligibility, not eligible for participation in the study, those included, those who completed the follow-up/intervention process and those finally use for analyses) is recommended to present using a flowchart. In addition, the descriptive characteristics of the participants (socio-demographic, clinical, nutritional, etc.) should be reported. Correspondingly, in studies investigating chemical, microbiological analyses of food or of various biological samples, the main characteristics of the study samples should be examined.
Regarding the main findings, first, the unweighted estimates should be listed, followed by the adjusted estimates after using confounding factors. Finally, any additional analyses (e.g. subgroups analyses, other sensitivity analyses) should be performed.

For the best presentation of the results, it is recommended to use Tables, Figures or Graphs. As for Tables, each column should have a short explanatory heading, whereas the use of vertical lines to separate columns should be avoided. Each Table, Figure or Graph should be self-explained. Any explanations (e.g. use of abbreviations, etc.) should be noted immediately after the Table, Figure or Graph. It is recommended that the results presented in Tables are not repeated in the Results section in the text and vice versa.

vi) **Conclusions – Discussion**

This section is connected with the abstract and especially with the part that regards the case examined in the Thesis. The researcher interprets the findings, describes their importance and compares them with those from other relevant projects discussing differences and similarities. The section concludes with considerations for further research and the addressing of questions that arose from the findings.

Limitations: Limitations of the study should be stated and discussed, taking into account potential sources of bias. At this point, every attempt to deal with possible sources of systematic errors should be described.

Conclusions: This section should close the Thesis with a discussion of wider acceptance of the findings, recommendations for public health arising from the findings of the Thesis or perspectives for future research, even formulating possible questions arising from the findings presented.

vii) **Bibliography**

All sources used in the Thesis are presented here (books, articles, announcements from conference minutes, etc.). Each reference must be listed according to the information for authors provided by the American Journal of Clinical Nutrition.

Examples:

Article in a Magazine: Hamer M, Steptoe A. Prospective study of physical fitness, adiposity, and inflammatory markers in healthy middle-aged men and women. Am J Clin Nutr 2009;89:85-89.

Chapter in a Book: Young VR, Tharakan JF. Nutritional essentiality of amino acids and amino acid requirements in healthy adults. 2nd. ed. In: Cynober LA, ed. Metabolic and therapeutic aspects of amino acids in clinical nutrition. Boca Raton, FL: CRC Press, 2004:439–7

For references from a website, note the name of the author (if known) or the organization/institute that cites this information, e.g.

Food and Agriculture Organization [FAO] (2010) Rice farming in Kenya. Accessed February 24, 2010, at http://www.fao.org/isfp/isfp-home/en/

viii) **Appendices**

The appendix lists the research questionnaires, and any other informational material necessary for understanding the text. If there have been publications and/or

announcements at international conferences, it would be useful to include them in the Appendix, at the end of the Thesis.

FOR MORE INFORMATION and details for each type of methodological design of the Thesis, the authors should consult the international guidelines STROBE and CONSORT:

- STROBE statement: Guidelines for recording and publishing observational epidemiological studies (prospective studies, case-control studies, cross-sectional studies)
    - http://www.strobe-statement.org/fileadmin/Strobe/uploads/translations/STROBE_Statement_Greek_2011.pdf

- CONSORT statement: Guidelines for recording and publishing randomized clinical trials
    - www.consort-statement.org/index.aspx?o=4156
    - http://annals.org/article.aspx?articleid=745807

More information for each type of methodological design:

- http://www.cochrane.org/about-us/evidence-based-health-care/webliography/books/reporting