

**Lebanese University**  
**Faculty of Dental Medicine**

**DOCTORATE PROGRAM**

**Guidelines for Thesis Submission**

Revised by The Research Council

**February 2021**

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## **Part I: Introduction**

### **1- Preface**

The Doctorate in Odontological Sciences (DSO) degree of the Faculty of Dental Medicine at the Lebanese University, represent a mandatory bridge for faculty and candidates that are interested to pursue an academic career at the Lebanese University.

Currently, the teaching staff of the Faculty of Dental Medicine are only eligible to the DSO program, with a minimum rank of: “Chef de Clinique”.

### **2- Program**

The program length is a minimum of 2 years that can be extended depending on the type of research conducted and after the approval of research authorities at the Lebanese University central administration.

Candidates are guided by a thesis director (with an academic title of Professor or Associate Professor with HDR) from the Faculty and one or more thesis co-director(s) from other local/regional or International University (ties) having a collaboration agreement with the Lebanese University; the co-director should have the academic title of Associate or Full Professor.

The candidate needs to submit the signed research protocol to the Dean who will forward it to the Research Council of the Faculty for review and final clearance.

The research proposal should be an original research performed *in-vitro*, *in-vivo* (clinical) on animals or on dental materials or any material used in dentistry or epidemiological research. Proposals should be novel with preferable clinical and social impact.

Candidate may follow different research methodological documents and checklists when applicable to the research protocol design (IMRaD, ICH, CONSORT, IEGES)

Candidates should also provide details about the laboratories where their experiments will be conducted and about the clinical set up (which should be at the Faculty of Dental Medicine) in case of clinical study. Finally, candidates need to provide a source of funding with a detailed description of expenses needed. All projects have to be submitted to the ethical committee of the University for clearance prior to project start. Acceptance of the project by the Research Council allows the candidate to register for the Doctorate program.

## **Part II: Thesis Defense Guidelines**

### **1. Eligibility**

To be eligible for defense the candidate has to publish at least two original research papers related to his doctorate in scientific journals indexed in PUBMED. The candidate should be the first and corresponding author, while the director should be listed as last author.

## **2. Thesis submission**

The written thesis draft (6 printed copies + digital) should be presented to the Dean's office with all signed documents from the thesis director and co-director. All documents will be sent by the Dean's office to the Research Council for review and decision within a time frame of 8 weeks.

After the Research Council clearance, the thesis defense committee will be appointed by the Dean. This committee is constituted by the Dean, the director, the co-director(s) and a minimum of 3 examiners from inside or outside the University having a Professor or Associate Professor (plus HDR) title. The suggested names are presented to the Faculty Council for approval. The University central administration should approve the thesis defense nominated committee and its budget allocation.

## **3. Thesis defense timeframe and grading**

The defense is public in front of the thesis defense committee; The defense includes a 30 min oral presentation by the candidate before the examination by the panel members.

Following the defense, the candidate can have the following outcomes and grades:

- Defense accepted without any modification and the candidate gets following grades:  
Excellent from > 18/20  
Very good from 16/20 to 17.99/20  
Good from 14/20 to 15.99/20  
Average from 12/20 to 13.99/20
- Defense accepted with modifications. The candidate needs to correct the manuscript and present it again to the examiners and get their approval before getting his degree.
- Defense rejected.

## **Part III: Thesis writing guidelines**

The following guidelines provide thorough and complete instructions for preparing and submitting the Doctorate thesis at the Faculty of Dental Medicine, Lebanese University.

### **1. Format**

The format of a thesis should follow the format of a scholarly journal, not less than 100 pages starting from the abstract until the final page of the conclusion.

References in the text follow the Vancouver style (refer to Annexe 1) The number in the text is written at the end of the citation and in superscript. The number written in the text is the order of appearance in the bibliography.

The final copies should have a **red hard cover** written in golden ink with the title of the thesis and the date of the final presentation visible on the lateral binding rim. Final **original copies** should be made.

One original will be kept at the Library of the Faculty, one copy at the Dean's office and other copies for the Director, co-director(s) and the jury members.

## **2. Description- Elements of a Thesis**

The manuscript should be clearly **divided** as follows:

Note that all headings of the thesis (Cover, blank page, title page etc..) always start on a new front page, never on a back page.

- **Cover**
- **Blank page**
- **Title Page same as cover page**
- **Original literary work declaration. Pagination in roman numbers**
- **Thesis release form. Pagination in roman numbers**
- **Acknowledgments / Grants. Pagination in roman numbers**
- **Table of Contents. Pagination in roman numbers**
- **Abstract (English). Pagination in roman numbers.**
- **Abstract (French). Pagination in roman numbers.**
- **List of Figures. Pagination in roman numbers.**
- **List of Tables. Pagination in roman numbers.**
- **List of Symbols and Abbreviations. Pagination in roman numbers.**
- **Introduction. From now on all pagination in Arabic numbers.**
- **Literature Review**
- **Significance, Objectives and Hypotheses**
- **Material and Methods**
- **Results**
- **Discussion**
- **Conclusion**

- **Bibliography**
- **Copy of the approval of the Research Committee / Ethical Committee when applicable**
- **Copy of the Informed Consent Form when applicable**
- **Papers published**
- **Curriculum Vitae of the candidate**

## 2.1 Cover page

- Logo in colors of the Lebanese University, Faculty of Dental Medicine on the top left.
- Logo in colors of the University where the research is performed or the University of the co-Director(s) on the top right.

**Then list in a centered alignment the following information:**

- Title of the Thesis in bold character
- Applicant's Name without his titles in bold character
- Write the following:
  - a) first line " Thesis submitted in the fulfillment of the requirements for the degree of "
  - b) second line "Doctorate in Odontological Sciences"
  - c) third line " of the Faculty of Dental Medicine"
  - d) fourth line "at the Lebanese University"
  - e) Doctoral Jury: list the name of the committee and their affiliations
    - Beirut, Lebanon
    - Year of the Defense session

## 2.2 Blank page

## 2.3 Title Page

Note that information on the title page is centered., same as cover page.

## 2.4 Original Literary Work Declaration

**List in a centered manner the following:**

- a) First line: " **Lebanese University**" in bold character
- b) Second line: " **Faculty of Dental Medicine**" in bold character
- c) Third line: " **Original Literary Work declaration**" in bold character
- d) Fourth line: " **Name of the candidate:**" in bold character. The actual name of the candidate is in normal character without titles

- e) Fifth line: "**Name of Degree:**" followed then by " Doctorate in Odontological Sciences".
- f) Sixth line: "**Title of Thesis:**" in bold followed by the title in normal character.
- g) Seventh line: "**Field of Study:**" in bold. The actual field is in normal character.  
Examples of field of study (Dental Materials, Clinical research, Neuroscience etc..)
- h) Eighth line: write the following text in normal character as follows:

I do solemnly and sincerely declare that:

- (1) I am the sole author/writer of this work
- (2) This work is original
- (3) Any use of any work in which copyright exists was done by way of fair dealing and for permitted purposes and any excerpt or extract from, or reference to or production of any copyright work has been disclosed expressly and sufficiently and the title of the work and its authorship have been acknowledged in this work.
- (4) I do not have actual knowledge nor I ought reasonably to know that the making of this work constitutes an infringement of any copyright work.
- (5) I hereby assign all and every right in the copyright to this work to the Lebanese University (LU), who henceforth shall be owner of the copyright to this work and that any reproduction or use in any form or by any means whatsoever is prohibited without consent of LU having been first had and obtained.
- (6) I am fully aware that if in the course of making this work I have infringed any copyright whether intentionally or otherwise, I may be subject to legal action or any action as may be determined by LU.
  - i) Ninth line: Date of the defense of the thesis in normal character.

## 2.5 Thesis Release Form

List in a centered manner the following:

- a) First line: "**Lebanese University**" in bold character
- b) Second line: "**Faculty of Dental Medicine**" in bold character
- c) Third line: "**Thesis Release Form**" in bold character
- d) Fourth line: "**Candidate name:**" in bold character followed by the name without titles in normal character.
- e) Fifth line: Write the following: I authorize the Lebanese University, Faculty of Dental Medicine, **one year** after the date of my thesis submission, to reproduce copies of my thesis (hard or electronic) and release them to the archives of the University library to make them available to the public for educational and research purposes.

f) Sixth line: Date of the defense in normal character.

## **2.6 Acknowledgments**

Acknowledge all who have made substantive contributions to the research and the thesis. Sources of funding or financial support should be listed when applicable.

## **2.7. Abstract**

not exceeding 350 words and structured into (*justified alignment*):

Two abstracts are written. The first one in English followed by a French one. The abstract should be followed by a list of key index words which indicate the content of the thesis. The maximum number of key words should not exceed 6.

## **ABSTRACT**

**Objectives**

**Material and Methods**

**Results**

**Conclusion**

and no other information

## **2.8 Table of Contents**

The title page is counted as page I, but the page number is not printed on the title page. Table of contents describes the several chapters of the thesis. It is followed by the list of figures, the list of tables and the list of symbols and abbreviations.

## **2.9 Chapter 1: Introduction**

a) First line: Write "**Chapter 1**" in bold character and centered.

b) Second line: Write "**Introduction**" in bold character centered.

Then summarize in maximum 2 pages the rationale and purpose of the study, giving only strictly pertinent references. Briefly review the current state of knowledge of the topic and a statement of the problem that the research is designed to address (equivalence to *significance in the Research Protocol*); e.g. to clarify the results of previous studies with conflicting results, to improve upon previous studies with major limitations, to investigate an unknown aspect of the topic, etc.

## **2.10 Chapter 2: Literature Review**

a) First line: Write "**Chapter 2**" in bold character and centered.

- b) Second line: Write "**Literature Review**" in bold character and centered.

Then a thorough review of the *pertinent literature* must be structured to progress from the historical background on the topic to current knowledge or if the topic is pertinent one can skip the historical background and describe in details the current situation of the research subject. Various controversies and unanswered questions should be comprehensively discussed. Different approaches which have been used to investigate a problem can also be analyzed. Common problems in reviews of literature are:

- 1) compiling quotations with no particular order, relationship, or unity of idea.
- 2) including remarks or data not highly relevant to the investigation. Literature reviews should generally be written in simple present tense.

### **2.11 Chapter 3: Significance, Objectives and Hypotheses**

- a) First line: Write "**Chapter 3**" in bold character and centered.
- b) Second line: Write "**Significance, Objectives and Hypotheses**" in bold character and centered.

Then state clearly in one page what is the significance of the work, what are the objectives and what is the working hypothesis. The objectives of the study should relate to a "problem" that has been highlighted in the review of the literature such an unanswered question. If there is more than one purpose, each objective should be stated separately.

### **2.12 Chapter 4: Material and Methods**

- a) First line: Write "**Chapter 4**" in bold character and centered.
- b) Second line: Write "**Material and Methods**" in bold character and centered.

Then the material and methods should be presented in sufficient detail so that the reader can critically review what was accomplished and to allow other investigators to repeat the experiments. Published methods should be referenced and discussed only briefly, unless modifications have been made. Statistical methods used to analyze and verify reliability and validity of data should be listed under a separate subheading at the end of this section. This section should be written in simple past tense.

### **2.13 Chapter 5: Results / Tables and Figures**

- a) First line: Write "**Chapter 5**" in bold character and centered.
- b) Second line: Write "**Results / Tables and Figures**" in bold character and centered.



Then the results should be presented in a logical sequence in the text, figures, tables and illustrations. Do not repeat in the text all data in the figures, tables and illustrations. The important observations should be emphasized.

Figures, tables and illustrations should be numbered consecutively with Arabic numerals. Both should have titles making them self-explanatory.

#### **2.14 Chapter 6: Discussion**

a) First line: Write "**Chapter 6**" in bold character and centered.

b) Second line: Write "**Discussion**" in bold character and centered.

Then summarize the findings without repeating in detail the data given the previous section. You can start by discussing the materials and methods and compare it with other research work. Results should be critically reviewed in relation to previously published relevant studies. Both agreements and disagreements should be discussed. The authors should also clearly describe the implications of the findings and their limitations. Any recommendations for further study should be mentioned at the conclusion of this section. This section should be written in simple past tense.

#### **2.15 Chapter 7: Conclusion and Implications**

a) First line: Write "**Chapter 7**" in bold character and centered.

b) Second line: Write "**Conclusion and Implications**" in bold character and centered.

Then in several sentences, summarize the study in one to two pages. A list of concrete conclusions based solely on the data should be included in this section. The clinical relevance of the research, if applicable, should be briefly stated in this short section. This section should be written in simple present tense.

#### **2.16 Chapter 8: Bibliography**

a) First line: Write "**Chapter 8**" in bold character and centered.

b) Second line: Write "**Bibliography**" in bold character and centered.

References accepted in the thesis are only taken from indexed published journals (online and hard copies) and books (online and hard copies), with an emphasis on having much more journals than having books. Websites and non-indexed journals are usually not accepted unless there is a very special reason.

A list of references should be given *at the end of the paper* and should be presented using the following guidelines:

Bibliography follows the Vancouver style of referencing. Each reference has got a number.

The order of references in the bibliography is the order of appearance in the text.

The order of the items in each reference should be:

a) For journal references: name(s) of the author(s), title of the paper, title of journal, year, volume, number (optional), first and last page numbers.

b) For book references: name(s) of author(s), title of chapter, title of book, editor(s), edition, page number, town of publication, publisher.

**Examples:**

Tonetti MS, Schmid J, Hämmerle CH, Lang NP. Intraepithelial antigen- presenting cells in the keratinized mucosa around teeth and osseointegrated implants. *Clinical Oral Implants Research* 1993;**4**:177- 186.

Poole B, Okhuma S, Warburton M. Some aspects of the intracellular breakdown of erogenous and endogenous proteins. In: Segal HS, Doyle DJ, eds. *Protein turnover and lysosome function*, 1<sup>st</sup> edition, p. 43. New York: Academic Press.

## **2.17 Copy of the Approval of the Scientific Committee/Ethical Committee**

## **2.18 Copy of Written Information and Informed Consent Form when Applicable**

### **Guidelines for the statement of written information**

The project should be described so that potential subjects, after reading the description, will be able to chose freely whether or not to participate in the project.

The written description should contain the following information:

1. clear identification of:
  - the university
  - the department(s) involved
  - the project title
  - the principal investigator(s);
2. an explanation in language that the subjects will understand of the aim of the project and the procedures to be followed. This should include a description of what subjects are expected to do if participating in the project, the anticipated time involved, and any possible risks, discomfort or inconvenience resulting from these procedures;

3. if medical treatment or care is involved, a clear statement that involvement in the project will not affect ongoing management or treatment of the subject's health;
4. clear indication that participation in the project is voluntary, and that subjects may withdraw consent to participate and discontinue participation at any time. Subjects should also be aware that they may, if they wish, withdraw any unprocessed data previously supplied;
5. an explanation of procedures adopted to ensure confidentiality of data. Information about how the data will be used should also be included and, where necessary, the steps to be taken to ensure that participants will not be identified (e.g. if case histories are to be written up in a report of the research, a statement will need to be included to indicate that information will be disguised by use of pseudonyms or other devices so that identification of the subject will not be possible);
6. an offer to answer any questions and contact name and telephone number if any further explanation is required.

#### **Guidelines for the statement of consent form**

A statement of evidence of informed consent should contain the following information:

1. clear identification of:
  - the university
  - the department(s) involved
  - the project title
  - the principal investigator(s);
2. a statement to the effect that the subject understands the nature of the project and what is expected of him or her, and his or her agreement to participate on that basis;
3. acknowledgement by subjects (where applicable):
  - that they have received an adequate explanation of all likely risks, effects, discomforts or inconvenience resulting from participation in the project;
  - that they understand they have the right to withdraw from participation at any time and that they may withdraw any data just supplied;
  - that they have read the written information about the project and have received a copy of that information;
  - that they are satisfied that the confidentiality of the information they have provided will be safeguarded;

□□ signatures of participant and investigator. Where the participant is under the age of 18 years, and is participating on an individual basis, the parent or guardian should also sign the consent form.

## **Editing Elements**

### **Scientific Names**

Proper names of bacteria should be binominal and the full proper name (e.g. *Streptococcus mutans*) must be given upon first mention. The generic name may be abbreviated thereafter with the first letter of the genus (e.g. *S. mutans*). If abbreviation of the generic name could cause confusion, the full name should be used. If the vernacular form of a genus name (e.g. streptococci) is used, the first letter of the vernacular name is not capitalized. Use of two letters of the genus (e.g. *Ps* for *Peptostreptococcus*) is incorrect. With regard to drugs, generic names should be used instead of proprietary names. If a proprietary name is used, it must be attached when the term is first used.

### **Abbreviations and Symbols**

The symbol % is to be used for percent, h for hour, min for minute, and s for second. *In vitro*, *in vivo*, *in situ* and other Latin expressions are to be italicized. Use only standard abbreviations. All units should follow the metric system. When writing decimals, a decimal point and not comma should be used. The full term for which an abbreviation stands should precede its first use in the text unless it is a standard unit of measurement.

## **2.18 Papers published.**

Add copies of the two or more papers related to the Doctorate published in PubMed journals.

## **2.19 Curriculum Vitae of the candidate.**

Add a recent CV.