Subject: Introduction to writing a dissertation in architecture

Methodological Teaching Unit
Semester: 2
Number of Weeks: 14
Class Hours (VHH): 1H30
Semester Class Hours: 22H30
Coefficient: 3
Number of Credits: 2
Evaluation Method: Exam

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PREAMBLE

Master's students must submit a research disseration at the end of their program, developed during the second year throughout the second semester.

This work allows students to develop skills in analysis, reflection, and problematization around a subject related to their field of study.

They are supervised by a chosen dissertation supervisor.

The research dissertation holds significant importance in validating the education. It is

Definition

A master's dissertation, also known as a master's dissertation, is a substantial piece of independent research conducted by a student pursuing (following) a master's degree. It represents the culmination (peak) of their academic studies and typically involves original research or an in-depth analysis of a specific topic within their field of study. A master's dissertation is expected to demonstrate the student's ability to critically evaluate existing literature, apply appropriate research methodologies, collect and analyze data (if applicable), and draw meaningful conclusions. The master's dissertation is an initiation into research that requires personal contribution. It is often required to be defended orally before a committee of faculty members or experts in the field.

Objectives of the master's dissertation

The objectives of a master's dissertation typically include:

- **Research Skills Development**: To provide students with an opportunity to develop and demonstrate their ability to conduct independent research within their field of study.
- **Critical Thinking and Analysis**: To encourage students to critically evaluate existing literature, theories, and methodologies relevant to their research topic.
- **Problem Identification and Solving**: To enable students to identify research questions or problems within their field and propose effective solutions or methodologies to address them.
- **Original Contribution**: To facilitate the creation of new knowledge or insights by encouraging students to make an original contribution to their field through their research.
- **Communication Skills**: To enhance students' ability to communicate their research findings effectively through oral presentations, written reports, and academic publications.
- **Professional Development**: To prepare students for future academic or professional endeavors by equipping them with the skills and experience necessary to succeed in their chosen field.
- **Demonstration of Mastery**: To demonstrate that the student has mastered the content, methods, and skills relevant to their field of study and is ready to earn their master's degree.

The major steps in developing a dissertation

The selection of the supervisor

The choice of dissertation supervisor is an important step in the realization of your dissertation. Some questions can help you make this choice:

Does he work in the research field that interests you? Does he have expertise in it?

Is he qualified to supervise your research? (University lecturer?)

Is he interested in the topic you want to address?

Has he encouraged you to conduct research with him?

Is he available enough to provide you with proper guidance?

The supervisor advises students throughout the research process and the writing of their dissertation or directed study project, establishing objectives, developing a schedule, and organizing their work.

The major steps in developing a dissertation

The choice of topic

A research topic is a focal point that guides the entire research process. It is essential to choose a topic that interests you, and you have a passion for, as research requires a lot of time and effort. Research topics can range from broad to narrow, depending on the scope of the research. It is the first fundamental step in the dissertation work. Its determination depends on several criteria:

-**Student's interests**: Desire, motivation, and interest are decisive factors in successfully completing the challenging task of the dissertation. Therefore, it is essential to find a topic that you have a passion for. Liking a topic is a necessary condition for success.

-**It should be original to you**, and you should have the desire to do better than what already exists on the subject.

-**Professional objectives**: It should be useful to you in your future professional life; it is in your professional interest to be able to showcase your dissertation to a future employer.

The major steps in developing a dissertation

The choice of topic

-Discussion with teachers.

-Discussion with students who have already written a dissertation.

Once the research field has been defined, it is still necessary to ask oneself a number of questions before embarking on this work:

-Does this topic address a need?

-Is there sufficient literature available? (Sources must be accessible and manageable)

-Are the required research methods suitable for my capabilities? (The method used must be manageable)

-Can it be addressed within the allocated timeframe?

-What are the expected outcomes?

The major steps in developing a dissertation

Exploratory phase: literature review

This involves collecting various types of theoretical and empirical information related to the initial question with the aim of choosing a theoretical approach and formulating a research problem.

This is an important but somewhat difficult task to accomplish because there is a great temptation to gather too much information, risking losing control of this mass of literature. You are not asked to compile all existing articles on the subject, but rather to make choices and define specific research areas.

Firstly, you need to gather a preliminary bibliography. The objective of this step is to write bibliographic cards (authors, article abstracts, keywords, etc.) and to create files by theme with the different references. It is preferable to start from the general to the particular:

-the most general: books, treaties, manuals, some periodicals

-the most specialized: journals, articles that concern your subject

-Databases

-Internet

Do the data obtained after processing validate the relevance of the initial question and theoretical framework?

The major steps in developing a dissertation

Formulation of the problem

The problem: The problem statement is a brief text that presents your research problem. It consists of the questions to be asked to understand and solve a problem or situation. It serves as **the guiding thread (fil conducteur)** of your dissertation.

The problem Launch the discussion by asking open-ended questions that do not elicit a simple yes or no response, but rather demand analysis. It can only be developed after a thorough understanding of the topic and research.

The problem It divides into three logically ordered parts: *Introduction, Developement and Conclusion*.

Introduction	Setting the scene	-Topic presented
Development	State of the question	-What we know -Relevance
	Formulation of the problem	-Finding a flaw or a gap -Demonstrating the relevance of filling this gap -Justifying the quest for a solution
Conclusion		-Formulation of hypotheses

Let us recall that the goal of science is to solve problems through scientific research.

PROBLEM → **SCIENTIFIC RESEARCH** → **SOLUTION**

A problem is a flaw in our knowledge, in 'what we know'. In plain terms, it's "what we don't know" but "that deserves to be known or better understood". In science, there are two categories of problems: true and false problems.

A true research problem must possess the following three characteristics:

A TRUE PROBLEM EST →

1) NON-RESOLVED = FLAW or GAP

2) RELEVANT

3) SCIENTIFICALLY SOLVABLE

If there is a solution, the problem is no longer a problem because it now belongs to our knowledge, to "what we know".

The major steps in developing a dissertation

Formulation of the problem

The problem is relevant if there are valid reasons that one seeks to resolve it.

By valid reason, we mean the existence of a theory or facts that allow the researcher to believe that X is indeed the cause of Y.

Finally, a problem is of a scientific nature if it can be solved through the scientific method; otherwise, it will be deemed insoluble or of a metaphysical nature.

Criteria for evaluating a dissertation

1- Format: A dissertation must contain at least the following well-formulated sections:

Title

Table of contents

Research abstract

Problem statement / Research question / Research hypotheses or objectives

Presentation of the subject: introduction, development, conclusion

Bibliography

Appendices

2- Problem statement

3- Mastery of the concepts used (Ability to manipulate the concepts used)

Definition of concepts and theoretical approaches used

Origin and evolution of concepts

Reflective dimension: specifying and discussing the limitations of concepts

Criteria for evaluating a dissertation

4- Relevance of the argumentation

Articulation, sequencing, and fluidity of ideas

Coherent and tight argumentation

Links, connections between chapters and sub-chapters

5- The quality and citation of sources

- Importance of the authors cited in relation to the thematic field being addressed
- Authors are placed in their historical and theoretical contexts

6- Syndissertation ability (introduction, conclusion) and openness

7- Theory/practice links

8- Scientific value:

- Journalistic style, as well as value judgments, are to be avoided
- Citations according to recognized scientific standards
- Construction and structure of the work (introduction: research question, hypotheses, construction of argumentation and illustration of ideas through examples, conclusion, and perspectives)
- Writing style and linguistic quality