of Public
Health



Ecole des Hautes Etudes en Santé Publique

The Master of Public Health PHP track 2023- 2024

# **Practicum Guidebook**

for M2 students; academic & professional advisors & jury members

Every year, the *Ecole des Hautes Etudes en Santé Publique* (EHESP School of Public Health) offers a one-year Master 2 program allowing students to acquire deeper knowledge and skills in the various disciplinary fields of public health, and choose to specialize in one of them. The M2 course draws on the content and skills acquired during the first year of the MPH (or equivalent course) with the overall aim of equipping graduates for leadership positions in institutions of public health at national and international levels.

As part of the program, students must complete a "Practicum" (internship) lasting a minimum of 4 months, which results in the submission of a thesis and an oral defence before a jury. This practicum is supervised by an advisor within the host institution (the « professional advisor ») and an « academic advisor » (appointed by the track coordinator) who monitors the progress of the thesis and provides methodological advice.

This guidebook aims to provide necessary information for:

- Students by covering instructions related to the practicum/internship & thesis,
- 2. Professional and Academic advisors on their supervisory roles,
- 3. **Members of the jury** regarding the thesis and oral defence evaluations.

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## THE PRACTICUM

## 1 – PRACTICUM OBJECTIVES

The practicum is an internship during which the student will have the opportunity to learn more about the roles and responsibilities of public health professionals within a host institution. Often, the host institution will assign a number of different activities and missions to the student who will be expected to complete specific tasks and problem-solve. Depending on the type of work being carried out at the institution that is hosting the student and its focus, the practicum may be more oriented towards either the professional or the scientific sphere, which may require the student to engage in field study, laboratory work and statistical analysis. While the practicum is an opportunity for the student to put into practice the knowledge and skills acquired during the program, they should also draw on their own personal resources: initiative, creativity, networking, teamwork, communication skills, etc.

Moreover, while the host institution will have a number of expectations and objectives related to the internship (which will be formalized in a contract), the student will need to identify one specific project/topic/problem that he or she will try to resolve by applying the knowledge acquired over the course of the MPH program. This project/topic/problem will be the focus of the thesis. The thesis topic should be a scientific and/or professional issue in the area of public health and be derived from the activities the student completes during the practicum.

Moving from the internship missions and projects to a thesis topic requires that the student engage in the following cognitive steps:

- Consider which of your missions/projects might be translated into a "research question". You can do this by analysing the problem in its context: collect data/information on the topic in question, examining its scientific, technical, social and behavioural dimensions, etc.
- 2. Consider the objectives that the thesis might aim to contribute to,
- 3. Consider the methodology and tools that would be pertinent to meet the objectives and the feasibility of obtaining this data,
- 4. Discuss and confirm your ideas of a thesis topic with your professional and SBSPH track coordinator and/or academic advisors.

## 2 - CHOOSING A PRACTICUM HOST & THESIS TOPIC

## The relevance of the host & topic:

The practicum/internship host institution and internship should be related to social and behavioural sciences and the activities, tasks, missions and projects that the student intern will be involved must allow the student to apply and develop relevant public health competences. The practicum host and projects/missions should also enable the student to complete their thesis work.

#### Feasibility:

When choosing a topic for the thesis, there are several factors that can make a topic difficult to study. Some topics may be beyond the scope of a Master's thesis and require that the student narrow down to a more realistic question. Alternatively a topic may be perceived as too complex or too vague thereby making it difficult for the student to gain access to necessary data. Finally, the timing of the project, missions or activities must take into consideration the need for the student to have the necessary data in time to complete the thesis before the due date.

#### Other criteria:

Consideration should also be given to ethical requirements or the need for confidentiality; student interns will be seeking employment at the end of their program and will need to be able to present their work in the recruitment process.

## **DURING THE PRACTICUM**

## 1 - THE FRAMEWORK REPORT

At the end of first month, students will submit a framework report with the help of his or her professional advisor. This framework report counts as your final evaluation for the Research Methods module. This report will be forwarded to the PHP track coordinator (and academic advisor if already attributed) who will provide feedback and a grade. Once the framework has been update given the feedback, you must upload on REAL the finalized copy.

This document should be **5 pages maximum** and include:

- project/thesis topic
- context of the project (i.e. research or other type of project)
- the research question (the questions it aims to answer)
- methods
- calendar

Since the framework is ultimately the outline of your thesis, it is recommended that you use the information below regarding the thesis format and layout as a guide.

The final framework report (which is an outline of the future thesis), should be co-signed by the professional advisor, the student and the academic advisor/PHP track coordinator.

### 2 – EVOLUTION OF THE PROJECT

The practicum may occasionally end up being carried out under conditions that differ from those envisaged at the outset. This may be due to:

- the absence or unavailability of human resources,
- difficulties/impossibility in accessing data,

- the quality of this data,
- the obsolete nature of the subject of the practicum itself,
- the emergence of a dimension of the problem not initially considered at the outset,

If this occurs, the project/thesis topic may need to be re-orientated and modified <u>and this must be discussed as soon as possible with the professional and academic advisors</u>. In this case, the explanations and justifications for these changes should be clearly explained in the thesis so they may be taken into account in the evaluation and in the assignation of a grade, since the student will not have been responsible for said changes.

## THE ROLE OF THE PROFESSIONAL AND ACADEMIC ADVISORS

## 1 – THE PROFESSIONAL ADVISOR

The **professional advisor** defines the missions, tasks and activities that the student intern will be involved in throughout the internship. They also ensure that the thesis topic is feasible and relevant to the objectives of the internship. The professional advisor provides support on two levels:

- on a primary level: by creating a conducive environment in which the practicum can take place (providing relevant contacts, allowing authorised access to internal documentation, encouraging initiatives, evaluating phases of completion, ensuring the student intern is exposed to relevant experiences),
- on a secondary level: by providing insider knowledge and clarification regarding the professional culture and know-how, the regulations and working procedures of the host institution.

The professional advisor is the representative of the host institution and in this regard, he or she is:

- deemed to represent the opinions of the institution,
- responsible for the progress of the student intern during the practicum, in particular related to their compliance with the specifications of the internship which the student has been charged with completing,
- in a position to notify the academic advisor or PHP track coordinator of any significant evolutions during the practicum (as discussed above), both in respect to the chosen topic or as a result of any relational or behavioural problems of the student.

At the end of the internship, the professional advisor completes a report evaluating the student on aspects such as:

- the quality of the students' work
- the integration of the student within the host institution
- the degree of compliance with the terms of the internship's activities and missions
- the student's capacity for analysis and synthesis

- the student's autonomy, organisational and planning skills
- the student's personal commitment, motivation and responsibility over the course of the practicum
- the student's interpersonal communication skills and capacity to adapt and fit into their team.

The professional advisor must fill in the evaluation sent by the MPH team as a Microsoft form at the latest: June 17<sup>th</sup>, 2024

## 2 - THE ACADEMIC ADVISOR

The **academic advisor** is responsible for:

- constituting an expert resource insofar as the thesis topic and/or chosen methodology
- maintaining contact, as much as necessary, with the professional advisor and liaising with the student, as required, over the calendar and progress of the project, in line with the provisional schedule.

The student is the sole author of the thesis and the redaction of this thesis remains their entire responsibility. There is no obligation for any prior rereading by the academic advisor.

## THE THESIS

## 1. CONTENT

Social and behavioral sciences investigate the influence of different environmental, sociocultural and behavioral factors on health outcomes among different populations, and provide insights on how to improve populations' health by acting on these factors. Students concentrating in these fields learn how community and social factors contribute to a variety of public health solutions, programs, local interventions and policies. Since students in the SBSPH track often obtain internships in field-based and service-oriented organizations (e.g. NGOs; local health agencies and governing bodies; municipalities...) in which they may work on multiple projects and tasks that are not research-focused, students will need to select one main project among their many missions/tasks for their thesis. It is possible that these tasks do not have a research angle, but rather entail the design and/or implementation of a public health intervention or a literature review to support intervention design, evaluation or recommendation. It is also possible to take advantage of the internship to design a study including data collection (e.g. interviews; online survey; questionnaires; observation... among staff, users, network..) in relation to a simple research question that interest both parties. In any case, it is necessary that you take some distance from the internship project to consider a broader, more far-reaching implication for public health.

Data collection (from questionnaires; interviews; literature..) and analysis (qualitative and/or quantitative; from primary or secondary dataset) is required in all PHP theses. This will require a systematic and evidence-based approach (use of a theoretical or conceptual framework and systematic approach).

The thesis should include the following sections, in accordance to the IMRAD structure:

#### I. An introduction

The aim of the introduction is to provide context and justify the research. The introduction can be guided by the 3 following steps:

First step: review relevant previous research and identify (when available)...

- 1. The problem and its public health consequences (burden)
- 2. Vulnerable populations, and evolution of the problem over time
- 3. The causes and determinants, including the protective factors
- 4. Theories explaining/describing the relationship between the problem and its determinants, and their limitations
- 5. Programs/interventions/policies addressing the problem, their efficacy, and their limitations

## Second step: Identify the gap in research and practices / room for improvement

e.g. lack of theoretical background or sound evidence; unexplained/unclear relationships; need for additional investigation or data on a particular topic/specific population; better assessment of the outcome; emerging risk/problem; lack of evidenced-based/tailored interventions; lack of proper follow-up/data collection; added value of a theoretical model..

#### Third step: State clearly, what you are planning to fill the gap/get some new insights

- 1. Present your research question (properly formulated) and hypotheses
- 2. Identify the study design and data needed to investigate the research question
- 3. State the study objectives

#### II. A method section

After the introduction & background (literature review), the next section is generally a *Methods* section that explains how you went about answering the question (or meeting the aim or objective) stated at the end of your introduction. It will detail what data was used if you are analyzing existing (secondary) data, in which case you will need to specify how you collected the documents. If you are collecting primary data (interviews, surveys/questionnaires) you will need to explain how the data collection tool was developed, how the data was collected and from whom (the sample). This section may be adapted according to the type of project you are working on, but includes usually the following subsection:

#### 1) Participants and procedure

Describe the study design (cross-sectional; prospective; retrospective...) and data collection method (online/onsite survey; experiment; use of existing data...)

The location (hospital; facility; NGO; country; city..), the study period (data were collected from ... to..) and the inclusion/exclusion criteria (e.g. adults aged between 18 and 70 years old; unemployed; with chronic disease; without cognitive impairment, etc..)

The recruitment procedure: how participants were approached/ enrolled? Informed consent and ethics procedure (IRB, data protection; anonymity...)

2) Measures: describe assessment tools and their characteristics Interviews grid (for qualitative studies): a list of open-ended questions

Validated questionnaires: description, validation studies; scoring, range...

Likert scales (4 or 6 or 10-point scale ranging from... to ...)

Data retrieved from database (medical records, etc.)

Other data collected (sex, age, occupation; martial status etc..)

Observation grid

## 3) Analyses

Qualitative analyses:

Some common approaches to analyzing qualitative data include: Qualitative content analysis: Tracking the occurrence, position and meaning of words or phrases; Thematic analysis: Closely examining the data to identify the main themes and patterns; Discourse analysis: Studying how communication works in social contexts.

Refer to the MPH courses in qualitative analyses to select the appropriate method

• Quantitative analyses: have to be presented in the following order:

Descriptive analyses (indicators for categorical and quantitative variables)

Bivariate analyses (chi square, comparison, correlation, univariate regression)

Multivariate analyses (multivariate regression)

Mediation or interaction effects (if relevant)

**III.** A Results section that presents the data you collected. No interpretation is required here.

Qualitative analyses: Report key findings under each main theme or category, using appropriate verbatim quotes to illustrate those findings. This is then accompanied by a linking, separate discussion section in which the findings are discussed in relation to existing research (as in quantitative studies).

Quantitative analyses: Present the findings from the simplest (descriptive) to the most complex analyses (multivariate model)

1) Descriptive analyses

Characteristics of study sample (% women; sex, etc..)

Description of the DV/outcome (characteristics and distribution\*)

Description of change in outcome\* (if repeated measures)

2) Bivariate analyses

ANOVA, correlation, chi-square; univariate regression

3) Multivariate analyses

Multivariate regression: linear (if the outcome is a score) or logistic (if the outcome is a binary varibale) or Poisson (If the outcome is a count variable)

**IV.** *Discussion section,* allows you to interpret the data in light of existing literature, and make sense of the data.

The discussion can be structured using the following steps:

- 1. Summary of the main results (similar to the result section of the abstract)
- 2. Discussing the findings concerning the outcome (descriptive analysis) in the light of your study population (sociodemographic...) and previous studies on the topic. Similarities and possible explanation for the differences. What is the main result and originality of your findings when it comes to the outcome? (in terms of study population, time period, assessment; location etc..). Do your findings support your initial hypothesis? Why and how?
- 3. Discussing the relationship between the outcome and the main independent variable (or predictor) in the light of your finings and previous studies on the topic. Similarities, and possible explanation for the differences. What is the main result and originality of your findings when it comes to the main independent variable and its relationship with the outcome? Do your findings support your initial hypothesis? Why and how?
- 4. Discussing the relationship between the outcome and others covariates (independent variables), including mediation effects and non-significant results..
- 5. **Limitations of the study** (study design; missing data; sample size; Representativity..) and strengths (one sentence)
- 6. **Conclusion**: what pattern emerged from your study? what have the study mainly demonstrated and what are the implications of the findings. It is important to suggest recommendations to improve the situation in the future or conduct additional studies. It is important to keep a distance from your thesis

topic, to gain some perspective, and focus on what has been acquired in terms of knowledge, or what new outlooks it may have opened for future research.

#### V. References

The principles of research integrity and ethics requires that students accurately reference and cite all their sources. These include:

- books, articles, along with authors' names and years
- web sites
- anonymizing participants' data and using quotation marks for verbatim

The school uses COMPILATIO – an anti-plagiarism software. See EHESP regulation and disciplinary consequences for plagiarism at <a href="https://mph.ehesp.fr/wp-content/uploads/2009/08/EHESP-Academic-Regulations-.pdf">https://mph.ehesp.fr/wp-content/uploads/2009/08/EHESP-Academic-Regulations-.pdf</a>

#### Other sections of the thesis include:

#### - Appendices, tables, illustrations charts etc.

- > The appendices should only include information relevant to understanding the main text: questionnaires, interview grid, ancillary analyses etc...
- > Cross-references to the appendices should be made in the main document.
- For simple graphics, ensure that colours can be printed legibly in black and white.
- ➤ All tables, graphics, figures and diagrams must include a label and be referenced in the text. In the event that they have been borrowed from other authors they must be clearly referenced.

#### - Abstract in English

The abstract should be between 250 and 300 words long, made up of simple, short sentences. The title and abstract together must form a comprehensible whole. It should provide answers to these four questions:

- What was the reason for the project? (context)
- How was this project carried out? (resources and methods)
- What discoveries were made? (results)
- What conclusions or generalisations may consequently be drawn? (conclusions)
- ➤ Include 3-5 key words

#### - Abstract in French

In addition to the English language abstract, the document must include an abstract in French, preceded by the translation of the title of the thesis.

## 2. FORMAT

## The Cover Page:

Use the cover page below in your thesis. The title must be as explicit as possible, while still being concise (potential for inclusion of a sub-title).



# **Master of Public Health**

Master de Santé Publique

## <Title of the Thesis>

< First name and SURNAME >

Class and year of the Master:

Location of the practicum:

Professional advisor: (name, institution)

Academic advisor: (name, institution)

## 3. LAYOUT

When structuring your thesis, use the following to layout to organise the different sections:

- Cover page with a title and sub-title
- Acknowledgements
- Table of contents with page numbers (use of *Styles* is highly recommended)
- List of acronyms
- Abstract
- Introduction
- Methods
- Results
- Discussion
- Conclusion/Recommendations/Implications
- References
- List of Appendices
- Abstract in French

## 4. LENGTH

The thesis **should not exceed 30 pages**, with Arial font, size 11 with 1.5 spacing and 2,5 cm margins.

The appendices and references are not included in the 30 pages. Efforts should be made to limit appendices to what is strictly relevant to the topic at hand. Illustrations should be included solely insofar as they contribute useful information.

THE THESIS MUST BE UPLOADED ON THE REAL BY: JUNE 18, 2024
BEFORE 11:55 pm

## CRITERIA FOR THE EVALUATION OF THE THESIS

The jury is composed of two reviewers and two presidents and their role is to assign grades to the theses.

The final grade takes into account both the oral and written components:

Written thesis: 50%Oral defence: 30%

- Q&A with the jury: 20%

The jury also considers:

- elements gathered during the oral exchange with the professional and academic advisors.
- written evaluations from these same advisors which also cover the soft-skill competences (see section on the role of advisors) and the assimilation or otherwise of advice given at various stages of the practicum.

#### 1 - EVALUATION OF THE ORAL DEFENCE

**The oral defence** evaluates the student's ability to present his or her work in a synthetic manner to a group of people who are not necessarily experts on the issue (but who are scientists/academics) and the student's ability to defend their choices throughout the project and respond to jury members' questions. The jury can use the table below to guide their evaluation of the oral defence:

COMPONENT	CRITERIA	EVALUATION
PRESENTATION	Quality of the oral & visual presentation Clarity of speech Coherence	
DISCUSSION WITH THE JURY	Relevance of answers Authenticity Reflexivity	

## 2 - EVALUATION OF THE WRITTEN THESIS

Below is a rubric to guide students in the redaction of their thesis and guide the reviewers in their grading of it.

# **Thesis rubric**

Criteria		Excellent (15-20)	Satisfactory (10-15)	Poor (<10)
Title (0,5)		,	Title offers some detail about the issue, but is lacking in relevant details	Title is irrelevant or fails to offer appropriate details of the study
Abstract (1,5)		Clearly & concisely states the research question, context, methodology, results, conclusion & implications for public health	Includes parts but not all of the following: research question, context, methodology, results, conclusion & implications for public health. Also includes vague or confusing information	Does not clearly state the research question, context, methodology, results, conclusion & implications for public health and provides inaccurate or irrelevant information.
Introduction (3)	Background/literature review		Provides a few references from the literature that vaguely point to public health problem.  Concepts are vaguely defined and operationally defined and problem is adequately framed.	Incomplete or disorganized literature review that does not adequately identify a public health problem or justify its importance, or the topic is of little importance. Fails to identify relevant concepts and the problem is not adequately framed.
	Problem identification	Clearly articulates the public health problem. Well-conceptualized.	States the public health problem in vague terms but understandable.	Incomplete or unfocused public health problem.
	Research question/objectives	Clearly formulates a research question or objective that is coherent with the literature & problem that was identified.	States the purpose of the research but questions lack focus or are disconnected from the background literature.	Does not provide a research question/objective.

	Research design	The research design is appropriate to answer the research question/objective. The purpose, question and design are coherent.	The research design has been described but lacks in detail or is insufficiently justified.	The research design is absent, confusing or not coherent with the research question.
Methodology (5)	Sample design	sampling procedure is appropriate	The sample and sampling procedure is described but lacks in detail or is insufficiently justified.	The description of the sample and sampling strategy is vague or absent and lacks relevance and/or justification.
	Data collection procedures	and accurately described and are	Data collection methods are described but are lacking sufficient detail. Ethical considerations are addressed.	Data collection methods are confusing, incomplete or lack relevance with research question. Ethical considerations are not addressed.
	Data analysis		Data analysis method is vague but complete but is relevant with research question and design.	Data analysis method is absent or confusing and not relevant to the research question and design.
Results (2)			Accurately presented but lacking in thoughtful organization of data.	Inaccurate or messy presentation of data with no organization.
Discussion (Can include recommendations for actions in the context of the objectives)  (5)		Thoughtful, detailed and comprehensive discussion of the findings that relates back to the research question. Key findings are confronted with the literature and implications are clearly stated. Shows creative and critical thinking with insight into the topic.	Limited discussion with some comparisons with the literature. Relates material to research question with some implications. Show some critical analysis.	No confrontation with the existing literature, fails to discuss key findings or relate to the research question. Shows little or no critical analysis.

Quality of writing (3)		attention to spelling, punctuation; sentence and paragraph structure and transitions that facilitate a logical	Manuscript is well-written but there are some typos and poor punctuation (less than 5) with only minor problems with the flow of sentence and paragraph structure.	Manuscript is poorly written, disorganized and difficult to read. There are more than 5 typos or problems with punctuation.
	Referencing system	consistent referencing system		Fails to cite references or mixes up different referencing styles within the manuscript (not appropriate for publication).

## **THE JURY**

## 1 – THE ORAL DEFENCE

It is the student's responsibility to inform their professional advisor of the dates of the oral defence which will be held the <u>1 & 2 of July 2024</u>.

#### **The Oral Defence:**

The oral defence is <u>not</u> simply a summary of the thesis. Rather it is intended to focus on the main findings and implications of the findings. The oral defence is public (except in the case of confidential theses) and lasts around **40 minutes**, according to the following schedule:

- 15 minutes for the oral accounts of the candidate
- 25 minutes of questions from the jury to the candidate and the candidates responses,

At the end of the oral defence, deliberations take place in private with only the reviewers and jury presidents.

Professional advisors can be present at the oral defence only if their presence will not interfere with the student's ability to provide a critical appreciation of the contents of their thesis. If present, professional advisors can provide their point of view, their motivations leading to the topic of the thesis, the conditions in which the project was conducted, their expectations and their level of satisfaction. If absent, the professional advisors will have provided this information in their final evaluation report for the jury. The professional advisors do not participate in the final evaluation of the thesis.

### 2 - THE ROLE OF THE THESIS REVIEWERS

As soon as the student's thesis has been submitted on REAL, these documents are sent to the members of the jury with this practicum guidebook and the thesis rubric.

As previously mentioned, there are two reviewers appointed by the SBSPH track coordinator according to the topic and methodology employed. Each reviewer is expected to read the thesis before the oral defence, prepare questions for the student and provide a final grade on the written work and oral defence.

#### 3 - THE JURY PROCESS

The oral defences generally occur over two days. The jury is presided by the heads of the five disciplinary tracks and the thesis reviewers.