

Guidelines for Submission of a Thesis Research Proposal and the Final Thesis

Hello,

We would like to congratulate you on joining the thesis track for the master's program in the School of Public Health.

This document details your rights and obligations as a student, as well as guidelines and timeline for the thesis, which are based on the policies of the Graduate Student Authority of the University of Haifa†.

†Note: the timeline and timetable in this document are valid for students of the Hebrew-speaking part-time MPH programs. They are not valid for graduates of the English-speaking, full-time international MPH (I-MPH). I-MPH graduates who wish to write a Master's thesis need to be registered in the "Preliminary research [pre-PhD] study track" after they have completed their MPH (see the document 'End of I-MPH process and signing up for thesis' for more information). Note that this is not a continuation of the I-MPH, as the I-MPH is a non-thesis degree. This is a separate program with its own admission requirements. The other information in this document (i.e. regarding thesis advisors, thesis proposal and thesis content and format, publishing the thesis as an article, and the related forms) do also apply to students in the Preliminary Research study track."

In order to continue in the thesis track, students must meet the following requirements:

1. An average grade of at least 85 in three basic first year courses: Introduction to Epidemiology and Research methods I (semester A), Biostatistics I and Epidemiology and Research methods II (semester B) is required.
2. A general average of at least 80 in first year courses.
3. A minimum grade of 70 in each of first year courses.
4. Second year studies in the thesis track will be pursued only if the student presents a formal written approval of the program head regarding his thesis topic and advisor to his instructor for the "Research Methods for Thesis" course. This approval should be handed over to the instructor no later than the second week of Semester A.

If you do not meet these requirements, you will be moved to the non-thesis track.

Choosing an advisor

In order to continue in the thesis track, it is your responsibility to obtain the agreement of an approved thesis advisor among the faculty members in the SPH, who will supervise you in your research.

The advisor must be a faculty member at the level of at least lecturer at the University of Haifa, approved by the Graduate Studies Authority and/or faculty member in the expert track who has

received special permission from the Graduate Studies Authority to serve as a thesis advisor. The list of potential advisors from the School of Public Health is updated from time to time, and appears at the end of this document as *Appendix A*.

In cases where the thesis advisor is not an approved advisor, an additional advisor must be added either from the School of Public Health or from the Faculty of Social Welfare and Health Sciences (with no need for special approval), or from another Faculty in the University (in which case approval from the Graduate Studies Authority is needed-- the application for approval is submitted through the school administrator). This issue must be addressed and settled at the beginning of the advisor-student relationship (and **not** at the time that the thesis is submitted) with the intention that the approved advisors are able to contribute from their knowledge and professional experience to the writing of the thesis proposal. University policy is that one advisor is enough, and no more than two are permitted.

It is recommended that once your thesis advisor has agreed to supervise your research, you should meet together to set expectations between the student and advisor. During this meeting, communication methods and decision-making processes (relating to both the relationship and the thesis itself) should be discussed.

The advisor must aid the student, be available and follow up on the development of the research with regular meetings and continual updates, including reading the various parts of the proposal and the paper and providing constructive feedback in order to advance the quality of the research.

The advisor has the full right to request that the student take certain courses, which he feels, will be important for completing the thesis. The completion of specific courses on the part of the student is considered a reasonable condition for agreeing to advice.

Choosing the thesis topic

The subject and methodology for the research should be based on the knowledge obtained in the framework of the courses in the School of Public Health. Thesis work that can be carried out without undergoing any of the courses in the school is not considered appropriate to be done in the framework on the School of Public Health.

Approval of program head

The head of the program track in which the student is registered must approve the thesis topic in writing, with a copy to the school administrator, as part of the submission of the thesis proposal, and before the submission of the final proposal. The approval will be sent to the school administrator and from there to the student, to the advisor, and to the student's personal file. *Appendix B* contains the structured form for approval of the department head.

Submitting the thesis proposal

According to the requirements of the Graduate Studies Authority, submission of the thesis proposal requires that the advisors sign off on it. It is recommended that the advisor look over the proposal as though it was submitted to be checked as an outside judge. The length of the research proposal should be no more than 15 pages (bibliography and appendixes not included).

Appendix C has a checklist for submitting the research proposal¹.

The Research

The research should be an independent study, which is the responsibility of the student and under the supervision of the advisor. This supervision includes the establishment of: the research topic, methodologies, the way by which the research is carried out, and the writing process through submission of the final report for review.

This document clarifies the central expectations and guidelines from the applicant who wishes to write a thesis. These expectations include, among others:

- A thorough search of current bibliographic materials in English and in Hebrew and writing in clear, high quality scientific language which integrates available literature
- Developing a high quality research proposal
- Collection and analysis of required data
- Ethical behavior
- Unless otherwise explicitly agreed between the advisor and the student, research expenses are the sole responsibility of the student. It is expedient to determine before beginning the work what the significant expenses are, and to organize accordingly.
- Any basic changes that occur in the process of the research must be carried only after written approval of the advisor.
- In case of changes in the work compared to the approved research proposal, acknowledgement of the change between the proposal and the thesis must be included, as well as a detailed explanation as the nature of and reason for the change.

Timeline

Following are the central points in time:

1. The search for an advisor will happen throughout the first year of studies, and by the beginning of the second year of studies. Following agreement of the relationship between the student and advisor, a setting of expectations and an initial examination of appropriateness will take

¹ Those who submit non-qualitative thesis proposals, or with an irregular format will be referred to their thesis advisor

place. The research topic must be approved by the head of the program **before** writing the final research proposal.

2. Throughout the relationship the student will receive direction from the advisor as to which courses must be taken (according to the research subject and needs of the student).
3. Agreement for supervision will be approved only after the advisor has found that the student meets the requirements for entry into the thesis track in the school, as detailed on page 1. An agreement document will be signed between the student and the advisor, where the advisor approves, in writing, their willingness to advise the student. If the advisor does not sign this form, this indicates that the advisor does not agree to advise the student. The form for advisor agreement can be found in *Appendix D*.
4. The student must update the advisor on their progress of the thesis proposal according to the agreement between the student and the advisor. For example, updating about the student's progress at the beginning of each month via submitting a form or sending an email detailing the progress and a work plan for the coming month.
5. A draft of the full research proposal must be submitted to the advisor by the end of Semester 1 of Year 2 at the latest, this is in accordance with the policies of the Graduate Studies Authority and the updates published by the school. If by this point, the research proposal cannot be corrected and is not fit for submission- **the advisor is entitled to end the relationship**.
6. Following advisor has signed approval; the research proposal will be submitted (along with the approval of the program head for the chosen topic) to the school's MA Committee. The date for submitting is by the **end of Year 2 of studies**. Failure to submit the proposal by this date will prevent the student from continuing to Year 3, and, in accordance with the decision of the instruction committee on 22.11.2012, will automatically transfer the student into the non-thesis track.
7. The proposal will be evaluated by one of the faculty members of the school. The committee receives the evaluation report and is authorized to either approve the proposal, to request revisions, or to reject it. The committee will notify the student and advisor of its decision at the end of the review process. If revisions were requested, the student must attach a signed letter which responds to each comment given and indicates the exact place in the proposal (including page number and paragraph) where the revision was made.
8. After the proposal is approved, the student must gain approval from the Faculty Ethics Committee and from any other relevant bodies according to the school policies and/or the policies of the framework in which the research will be carried out. In special cases, approval from the Ethics Committee may be applied for before the proposal has received final approval, with written approval from the advisor. If the study requires Helsinki approval, the student must receive this approval before beginning the research. Details on submitting the request to the Faculty Ethics Committee can be found at their website: <https://hw.haifa.ac.il/faculty-about/faculty-ethics>

9. Once the research proposal has been approved, and the appropriate approval from the Ethics and/or Helsinki Committees have been obtained, the student may begin data collection. It is highly recommended that the data collection be completed by March of Year 3 of the degree.
10. By the beginning of July of Year 3 of the studies, it is recommended that the student submit the results chapter to the advisor based on analysis of all the study data.
11. Submission of the full thesis to the advisor should be **no later** than the middle of August in Year 3 (in order to allow enough time to make necessary changes and edits).
12. The student must conduct a full and intense proofreading of the full work before final submission to the Graduate Studies Authority. The student must ensure that the submission complies with the writing policies detailed on the website of the Graduate Studies Authority of the University of Haifa. The writing policies (in Hebrew) can be found at: <https://graduate.haifa.ac.il/images/stories/tfasim/Doctoral/HanhayotHe.pdf>
13. Submission of the full thesis, after the advisor's corrections and with their approval, should be done no later than 30.11 after the completion of Year 3 of the studies.

Table: Summary of central responsibilities and timetable for completion of the thesis

Phase	Deadline	Comments
Finding an advisor, signing the consent form, choosing a topic, obtaining approval from the program head, and solidifying the research proposal	by the beginning of Year 2 of studies	
Submission of a draft of the thesis proposal to the advisor	by the end of Semester 1, Year 2- required	
Submission of the final research proposal to the MA Committee, following advisor approval	end of Year 2 of studies- required	The committee may approve the proposal, request revisions, or reject it. Failure to submit the proposal on time means that the student will automatically be transferred to the non-thesis track.

Submission of the proposal for approval/s from the Ethics / Helsinki Committees	No later than the beginning of Year 2, Semester 2- recommended	
Recruiting participants and data collection	By 01.03 of Year 3 of the studies- recommended	<u>Only after approval of both the MA Committee and the Faculty Ethics committee</u>
Submitting the results chapter including the data analysis to the advisor	By 01.07 of Year 3 of the studies- recommended	
Submission of the final draft for approval from the advisor	By 15.08 of Year 3- required	to allow time for review and changes
Final submission of the thesis <u>after advisor approval</u>	No later than 30.11 after Year 3 of studies- required	After examination and approval by the Graduate Studies Authority that they thesis was written according to the guidelines, and after final signed approval from the advisor

Submitting the thesis as an article

A student may apply, at the discretion and approval of the supervisor, to submit their thesis as an article, where the student is a first author, to be accepted and published in an international peer-reviewed journal, rated as Q1 / Q2 only. The application will be submitted for approval to the Master's Committee of the School of Public Health (using the form in Appendix E). In the case that the application is approved, it will be subject to the approval of the Advanced Studies Authority, and only upon the receipt of the authority's approval will the student's application be finally approved.

In case the application is approved as aforesaid, the approval of the thesis will be conditional on the presentation of a certificate of receipt of the article for publication, in accordance with the conditions of approval of the application. Any change in the terms of approval of the application,

will require the approval of the Master's committee. The thesis work will be submitted as an article, in accordance with the latest guidelines of the School of Public Health for submitting a thesis as an article (latest guidelines at the time of the thesis submission).

In case the article is not received, the thesis work will be submitted using the (complete) format for submitting a (non-article) thesis, which is not the same as the format for submitting a thesis as an article, in accordance with the Public Health School's guidelines for submitting a thesis (latest guidelines at the time of the thesis submission).

All requirements and obligations that will be imposed on the student by the journal for the submission and publication of the article are the sole responsibility of the student.

Thesis work as an article will be submitted in the form of a thesis proposal (according to Appendix C) and will include the published article, in addition to chapters of abstract and main results of the study, a description of the significance of the study and a concluding discussion with recommendations (according to Appendix F).

Thesis work as an article will be submitted for evaluation by the fastest possible process, similarly to a non-article thesis.

Requests for extension and ceasing the relationship

In a case where the advisor reaches the conclusion that the research is not being carried out according to the timeline or the demands of the thesis, the matter will be brought for discussion to the MA Committee, and the option to transfer the student to the final project track will be considered (that is, Track B, without a thesis).

- In any case of deviating from the requirements, the student must request an exemption in writing from both the advisor and the head of the MA Committee, with explanation and details of the reasons, and any relevant documents should be included (requests for an extension of time for submission will be written on the relevant form). Extensions will be approved by the relevant bodies only in extenuating circumstances. After approval of the extension, a new date for submission will be set in writing.

- If the student feels that they are unable to, or no longer wishes to, perform the research in the required time, they are entitled to declare the decision to stop the research project. At this stage, the student is required to hand over all materials that were collected up until this point to the advisor, and to complete any remaining academic requirements (while transferring to the non-thesis track). This is the case even if the student is part of a group of students who have committed to a joint project.
- If the student feels that the cessation of the relationship with them was unjustified, they are entitled to appeal to the head of the MA Committee (or the head of the school, in cases where the head of the MA Committee is the advisor), to examine whether the ceasing of the relationship was in fact done according to policy.

Submitting the Work

As was stated in the timeline, submission of the work will be done in accordance with the policies of the University and after all of the required bodies have signed off on the work. In addition, a regular thesis shall not be longer than 50 pages (with exclusion of bibliography and annexes). Waiving the thesis length limitation will be possible only with the approvals of the advisor and head of the MA Committee.

A proposed checklist for submitting the thesis can be found in *Appendix E*.

Evaluation of the work

According to the policies of the Graduate Studies Authority, evaluation of the work is conducted by the advisor (or advisors) and by an external reader, and the final grade is an average of these evaluations. The grade from the external reader is given based on the final work alone, while the evaluation of the advisors might include an element of evaluating the process as well as an evaluation of the final work. It is recommended that the advisor (or advisors) express their evaluation of the final product and of the work process separately, and that the final grade given by the advisor be a weighted average (weighted based on the advisor's judgement) of these two elements.

If revisions to the thesis were requested, the student must attach a signed letter responding to each comment which directs the reader to the page and paragraph in the work where the change appear, if it was carried out.

Scientific publications, industry use, patents for advanced students

Encouragement to publish

The School of Public Health encourages the publication of research that was carried out as part of the studies in the form of scientific articles or conference presentations.

Paper authors

For a published article based on final work carried out by a student, it is generally recommended that the student be listed as the first author or second author, and the advisor as the first or second author. An additional advisor (not school academic staff) would, in this case, be listed as the third author. In addition, the main advisor or the more senior advisor can be listed as the last author as the head of the research team.

However, there are instances where, for various reasons, the student does not work to submit the research for publication. In these cases, it is fair that the authors of the work (the advisor among them) be listed as first and last authors, and the student be listed as third (or other appropriate place) author. Any paper based on the research data of a thesis for an advanced degree must explicitly disclose this, according to the policies of the University.

It is recommended that **before** any process of writing an article begins, a joint meeting regarding the process and placing of authors takes place.

In a case where there are multiple advisors, all of the advisors for research undertaken as part of advanced degrees should be listed as authors on any article based on the research for an advanced degree. This is important not just because of their contribution to the research, but also due to the joint responsibility for the research and its quality.

Use of the data

All of the study data must be available to all research advisors, future publications based on these data can be done only with their consent, and all advisors should always be included as authors.

Submitting research proposals and receiving research grants

Students are encouraged to be active in the writing of the research proposals and in submitting requests for grants. In any request for funding for the research, the names of the advisors are to be included.

Privacy

Any study, which includes intervention among humans, requires Helsinki Committee approval (Institutional review board- IRB) from the hospital or University. Any publication requires care and meticulousness to ensure the privacy of research participants, according to the University policies.

Appendix A: List of Approved Advisors in the School of Public Health, as of the 2024-2025 Academic Year

Prof. Aviad Tur-Sinai
Prof. Diane Levin-Zamir
Prof. Galit Weinstein
Prof. Lital Keinan-Boker
Prof. Manfred Green (Emeritus)
Prof. Maya Negev (on sabbatical)
Prof. Meir Pugatch
Prof. Orna Baron-Epel (Emeritus)
Prof. Ronit Endevelt
Prof. Sharon Sznitman
Prof. Shira Zelber-Sagi
Prof. Stephen Levine
Dr. Geffen Kleinstern
Dr. Maya Peled-Raz
Dr. Mika Moran
Dr. Pavel Goldstein
Dr. Roni Elran Barak
Dr. Tair Ben Port
Dr. Yonah Amster
Dr. Yuval Nov

Appendix B: Approval from the program head for the chosen topic (You may use a mailed approval of the program head and copy your advisor and the SPH administrator)

Date: _____

Topic approval for thesis

Dear:

Dr. / Prof: _____

Head of program / study track: _____

Hello,

I, _____ ID#: _____

Am interested in conducting a thesis on the following subject:

Under the advisement of:

1. _____
2. _____

Sincerely,

(Name of student and signature)

Approval of the program head

I, _____ approve / do not approve the thesis topic.

Name: _____ Signature: _____

Date: _____

Appendix C: Checklist for submission of the research proposal (The student is requested to add his signed checklist to the submitted research proposal as a separate document)

#	detail	included
A	Approval of the program head for the research topic (separate form)	
B	External title page*	
C	Internal title page*	
D	Structured abstract (background, purposes, methods, research importance)	
E	Table of contents	
1.0	Introduction	
2.0	Scientific background	
3.0	Research importance	
4.0	General purposes	
5.0	Specific purposes	
6.0	Research hypotheses	
7.0	Methods 7.1 Research type 7.2 Target population 7.3 Research population 7.4 Sampling and recruitment methods 7.5 Sample size and justification (power) 7.6 Research process (methods for data collection) 7.7 Variable definitions (conceptual and operational definitions) 7.7.1 Dependent variable/s 7.7.2 Independent variable/s 7.7.3 Other central variables: universal variables, potential confounders, modifiers, etc. 7.8 Research tools, including reliability and validity 7.9 Prevention and treatment of selection bias 7.10 Prevention and treatment of information bias	

	7.11 Treatment of confounders 7.12 Treatment of modifiers 7.13 Quality control and data handling 7.14 Data analysis methods	
8.0	Preliminary research findings (if they exist)	
9.0	Timeline for the research	
10.0	Ethical considerations and approval from the Ethics / Helsinki Committee	
11.0	Resources, equipment, and physical tools for the research	
12.0	Advisors / inter-institution cooperation	
13.0	Bibliography	
14.0	Appendixes (ex: survey, informed consent forms, CV's of the researchers)	

*For the required content on this page, see the website of the Graduate Studies Authority

**Style guidelines for writing appear at the end of this document

Appendix D: Consent form for advisors

Date: _____

Student name: _____

Student ID #: _____

Study program: _____

Year of beginning of studies: _____

Chosen topic:

The advisor and their academic association:

The advisor agrees to advise the student in the writing of the thesis on the subject listed above, the advisement is based on the following conditions (Ex: courses, a pre-determined timeline, etc):

1. _____

2. _____
3. _____
4. _____

Signature by the advisor of this document requires them to engage in the responsibilities of advisement (as described in this document) and according to the conditions established; signature by the student of this document requires them to engage in the responsibilities of carrying out the work according to the conditions listed above. Each side is entitled to end the relationship if the conditions are not met as defined on this form and in this document, with notification ahead of time.

Advisor signature

Student signature

Appendix E: Application for approval of a thesis as an article

Date: _____

Application to submit a thesis as an article

Dear:

Master's Committee

School of Public Health

Hello,

I, _____, student ID#: _____

Request to submit a thesis as an article on the subject:

Under the advisement of:

1. _____
2. _____

Name of the article to be submitted: _____

Names of the authors in the order they are listed in the article (the student is first author or second with equal contribution). In case where other authors than the student and the advisor are listed in the article, the reason for their inclusion should be noted:

1. _____
2. _____

The reason for including additional authors:

Names of potential journals to which the article will be submitted:

Name of Journal	Impact Factor	Rating (Q1/Q2)

Notes: Impact Factor and Q rating details will be the ones valid for the last year by the time the application was submitted. It may be possible to submit the article to other journals than the enumerated above, as long as they are international peer-reviewed journals, rated as Q1 / Q2

Description of the article and its connection to the thesis: _____

Description of the novelty of the article and the potential for its publication:

Description of academic abilities, including grades in graduate studies (please attach an up-to-date transcript):

Description of the student's contribution to the article. Please address each of the following contributions individually: defining the concept of the article, obtaining funding sources for research, literature review, methodology, data collection, data analysis, writing of article initial draft, writing of comments on the article, writing of article final version:

I confirm that if my application is approved by the Master's Committee and the Graduate Studies Authority, approval of the thesis will be conditional on presentation of a certificate of receipt of the article for publication, in accordance with the terms of approval of the application. Any change in the terms of approval of the application, will require the approval of the Master's Committee. The thesis will be submitted as an article, in accordance with the latest guidelines of the School of Public Health for submitting a thesis as an article (latest guidelines at the time of the thesis submission). In case the article is not accepted for publication, I confirm that I will have to submit the thesis work in the (full) format for submitting a non-article thesis, in accordance with the latest guidelines of the

School of Public Health for submitting a (non-article) thesis (latest guidelines at the time of the thesis submission).

I confirm that all the requirements and obligations imposed on me by the journal for the submission and publication of the article are my sole responsibility.

Sincerely,

Student name: _____

Signature: _____

Name and signature of the supervisors confirming the request:

I/we approve the student's application to submit their thesis as an article:

Name: _____ Signature: _____

Name: _____ Signature: _____

Appendix F: Checklist for the final submission of the thesis report (The student is requested to add his signed checklist to the submitted research proposal as a separate document)

#	detail	included
A	External title page in English*	
B	Internal title page in English*	
C	Acknowledgements (to be added to the final thesis only after the review process)	
D	Table of contents*	
E	Structured abstract in English* (background, purposes, methods, results, conclusions)	
F	List of tables	
G	List of Illustrations	
1.0	Introduction	
2.0	Scientific background	
3.0	Research importance	
4.0	General purposes	
5.0	Specific purposes	

6.0	Research hypotheses	
7.0	<p>Methods</p> <p>7.1 Research type</p> <p>7.2 Target population</p> <p>7.3 Research population</p> <p>7.4 Sampling and recruitment methods</p> <p>7.5 Sample size and justification (power)</p> <p>7.6 Research process (methods for data collection)</p> <p>7.7 Variable definitions (conceptual and operational definitions)</p> <p style="padding-left: 20px;">7.7.1 Dependent variable/s</p> <p style="padding-left: 20px;">7.7.2 Independent variable/s</p> <p style="padding-left: 20px;">7.7.3 Other central variables: universal variables, potential confounders, modifiers, etc.</p> <p>7.8 Research tool, including reliability and validity</p> <p>7.9 Prevention and treatment of selection bias</p> <p>7.10 Prevention and treatment of information bias</p> <p>7.11 Treatment of confounders</p> <p>7.12 Treatment of modifiers</p> <p>7.13 Quality control and data handling</p> <p>7.14 Data analysis methods</p>	
8.0	Results	
9.0	Discussion, including weaknesses and strengths of the study (Refer to the detailed recommendations for writing a discussion at the bottom of this document)	
10.0	Description of the student's role in the research (as detailed below) †	
11.0	Bibliography (Students should use an automatic software in order to create a bibliography list such as EndNote or Zotero approved by the thesis supervisor. The library offers training in using the software).	

H	Appendixes (ex: survey, informed consent forms, CV's of the researchers)	
I	Structured abstract in English* (background, purposes, methods, results, conclusions)	
J	Internal title page in English*	
K	External title page in English*	

*For the required content on this page, see the website of the Graduate Studies Authority

**Style guidelines for writing appear at the end of this document

†Outline for describing the role of the student in the work of the thesis

This chapter must include a declaration which includes the role of the student in the research in the following areas:

- Identification and design of the research plan
- literature review
- Implementation of the different parts of the research, including for example: identification and recruitment of study participants, construction of the research tools, data collection in interviews and/or tissue collection, quality control
- Statistical analysis of the study data (in cases where the research is based on an existing database, a more in-depth explanation is warranted)
- Writing of the results and discussion
- If part of the thesis has been published or submitted for publication, this must be noted
- Bibliographic details must include the title of the article, name/s of the author/s, and name of the journal.

In certain cases, additional explanations will be needed. The content of this chapter must be approved by the student's advisor.

Writing style instructions

For additional and more detailed guidelines, read the “Thesis Writing Guidelines” published by the University of Haifa. The guide, in Hebrew, can be found at:

<https://graduate.haifa.ac.il/images/stories/tfasim/Doctoral/HanhayotHe.pdf>

Body (font):

- Font size 12, the font choice is left to the student, with the stipulation that it should be clear and easy to read. A smaller font size (though no smaller than 8) may be used for labeling graphs and tables.
- Line spacing of 1.5 should be used.

Margins

The required margins for a final work in English (according to the page settings on the computer, there is no need to measure the margins with a ruler):

Right margins: 2 cm

Left margins: 3 cm (to allow for binding)

Upper margins: 2 cm

Lower margins: 2 cm

For a thesis which will be submitted in Hebrew, reverse the right and left margins.

Page numbering

Pages which appear before the body of the work (that is, before the introduction chapter) will not be numbered (title page, the abstract, and table of contents). For submission, these pages will be numbered with Roman numerals at the bottom center of the page.

The body of the work, the bibliography, and the appendixes will be numbered with continuous numbers (starting from 1) which should be printed in the bottom center of the page, 2cm from the bottom edge.

Table of contents

- In every submitted work, a table of contents should be included, which details the central topics, secondary topics, and the appropriate page numbers.
- The tables of contents should be printed either single-spaced or 1.5 spaced. Between each chapter a single empty line should be printed.
- Take care that the names of the sections as they appear in the table of content and in the body of the work are exactly the same.

Writing the Discussion chapter in the Thesis

Suggested fixed outline for the Discussion chapter (It is highly recommended to divide the Discussion to sub-chapters according to this outline):

1. Opening paragraph where you reiterate the research purpose and point out the main results and whether they are/are not in line with the primary research hypotheses.
If there are several research purposes and hypotheses, you can divide the discussion to sub-chapters.
2. Describing the extent to which the current results correlate with the results of previous studies and discussion of possible explanations in cases where low correlation is found- i.e., the idea is to write a discussion, not citing the results, which were presented in the Results chapter.
3. Interpretation of the results from the public health perspective- what conclusions can be established upon these results and what the implications are for public health, policy or the need for intervention. Do the results deserve further research and in which direction.
4. Addressing the weaknesses and strengths of the current study. In-depth discussion of the research limitations shall always include: selection bias, information bias, confounders and residual confounders. Additional limitations may be associated with specific types of research, for instance: a lack of temporality, incapability to prove a causal link, negative causality and lack of sufficient statistical power. The writer should address the implications of the research limitations on the interpretation of the current research results.
5. A concluding paragraph, which summarizes the research conclusions as well as future research directions that may be explored.

NOTE: The above outline is only a proposed one. The usage of sub-chapters can be flexible according to the research topic and results.

In an article/ MA Thesis/ PhD Dissertation, the Discussion chapter is the most challenging chapter for writing, and often is the most interesting for reading

In general, the purposes of the Discussion chapter in the research work are: discussing the significance of our research results, describing the importance of the results, discussing the current results in comparison to the results of previous studies and describing the scientific contribution of the current research.

The Discussion chapter corresponds with the preceding chapters in an article:

It pertains to results, which were introduced in the Results chapter and their evaluation with respect to results of previous studies that were introduced in the Literature Review.

Additionally, the Discussion indicates how the research fulfilled its purposes (by way of confirmation/ refutation of hypotheses) and explains how the current study contributes to better understanding of reality, by answering existing research gaps in scientific literature. Contribution can be either theoretical or empirical.

Before writing this chapter, it is advisable to think of main themes for discussion, for instance 3 main insights. It is possible to construct the discussion as a chapter containing few sub-chapters, where each sub-chapter is dedicated to one of the main themes.