

MEDICAL FACULTY OF VILNIUS UNIVERSITY

**RECOMMENDATIONS HOW TO PREPARE AND DEFEND THE FINAL
THESIS FOR MEDICAL PROGRAMME STUDENTS**

2018

1. GENERAL RULES

- 1.1. This description sets out the procedure for the preparation and defence of the final research works (Final thesis) of the English speaking students studying at the Faculty of Medicine of Vilnius University. This description is prepared in accordance with the Vilnius University Senate Resolution No. S-2017-12-11 in 2017 December 19th.
- 1.2. The terms used in the Recommendations are:
 - 1.2.1. **The Final thesis** is a written essay which corresponds to the requirements of university studies and which indicates the student's ability to apply knowledge acquired through studies, to select the scientific literature appropriately, to apply the research methods properly, to solve independently the tasks raised, to present his conclusions and recommendations, also showing the ability to correctly present the study in a correct scientific language.
 - 1.2.2. **The Defence Committee** - is composed of competent specialists of the relevant medical specialties, whose experience is related to the field of study and approved by the Dean of the Faculty of Medicine. In the Faculty of Medicine, the Defence Committee is established in each Department/Clinic if there are students wishing to defend the Final thesis. The Committee at the Department/Clinical should consist of at least 5 (five) employees. The Commission is chaired by the Chairman of the Committee. In Department/Clinic, more than one Committee may be composed if the defences take place in different medical specialties.
 - 1.2.3. The fact of the **plagiarism** is the use of another persons' authorship, for example, use of the text of the protected object or its' part without indicating the original author and source of that text or by indicating it incorrectly (not complying with the requirements of the citation) or giving a misleading reference.
 - 1.2.4. **Division Administrator** - teacher of the Faculty of Medicine, responsible for the teaching of the subject "Research methodology and Biostatistics" and organization of final thesis procedures and data processing in the Vilnius University Information System (VUSIS).

2. HOW TO PREPARE THE FINAL THESIS

- 2.1. The final research work is carried out in accordance with the methodology outlined in this document.
- 2.2. The Final thesis may be of a **descriptive** (1) or **analytical** nature (2). The classification of research studies and their differences are set out in Research methodology subject in the second year of the medical studies and it is recommended to follow them. Before writing the

Final thesis, the student is also advised to read the methodological articles referenced in the Reference list of these recommendations.

- 2.3. The Final thesis must be prepared in fluent English language. The work should comply with the English language requirements and rules of writing, and bibliographic referencing, and their listing in research work.

3. SUPERVISION OF THE FINAL THESIS

- 3.1. The topics of the final thesis are offered by the institutes of the Faculty of Medicine. The student also has the right to suggest the topic of the Final thesis. The topic chosen must be agreed with the supervisor from the particular Department/Clinic.
- 3.2. It is mandatory that the Final thesis should be supervised by the staff member of the Medical Faculty, although the consultant of the thesis may not be a member of the Medical Faculty. The Final thesis should be prepared and defended at the Department/Clinic where the supervisor belongs to.
- 3.3. Heads of the Institutes or the responsible staff of the Institutes, apply to the Head of Departments/Clinics for topic titles and receive the titles of the topics from the Department/Clinics. The titles of the topics are emailed to the Divisional Administrator before September 15th, the 11th semester.
 - 3.3.1. The Institute of Clinical Medicine suggests 150 topics
 - 3.3.2. Institute of Biomedical Sciences suggests 25 topics
 - 3.3.3. Institute of Health Sciences suggest 25 topics
- 3.4. All topics are given in Lithuanian or English language both (**Annex 1**).
- 3.5. The proposed titles of the topics as well as their supervisors should be approved by the Medicine Programme Committee and the chairman of this Committee.
- 3.6. The topics of the Final thesis appear on the website of the Faculty of Medicine and or Vilnius university information system (VUSIS) before the **15st of November** of the 11th semester, indicating the title of the topic and the supervisor of the topic. The topics of the Final thesis are placed on the website of the Faculty of Medicine or VUSIS by the Administrator after receiving this information from the Departments/Clinics.
- 3.7. After having selected the topic form the list and discussing it with the Supervisor, the student writes an application stating the title of the topic, the supervisor and the Department/Clinic where it is going to be defended. In this case the signature of the student is enough for the application (**Annex 2**).

- 3.8. The student himself may initiate and suggest the title of the work topic. In this case, the application is signed by the student and his supervisor both (**Annex 3**).
- 3.9. If the student does not decide on the topic of the final thesis or if there are other problems, the topic and the supervisor are offered by the Head of the Department / Clinic, or the topic is offered by the student and the supervisor is appointed by the Head of the Department / Clinic.
- 3.10. Clearly written and error-free application can be sent by e-mail or brought in paper to the Institute responsible staff.
- 3.11. The application is submitted to the Institute responsible staff on working days not later than **December 1st** of the current year.
- 3.12. The list of the topics indicating the name of the Department / Clinic, the title of the final thesis, the name of the student and his supervisor is published by the Division Administrator before **December 15th** on VUSIS and / or the Faculty of Medicine websites
- 3.13. The recommended topic of the Final thesis is the student's research work carried out during the study years. A clinical case or case series description is equally suitable topic of the Final thesis.
- 3.14. The topic can be adjusted with minimal corrections during the final work process; in exceptional cases the work topic can be changed. When changing the topic of work, a new application is sent to the head of the institute with the signature of the supervisor.
- 3.15. If the head of unit or the supervisor of the Final thesis considers that it is necessary to obtain an authorization from the administration of the hospital regarding the use of clinical data in the Final work, the student is obliged to do so. If the data source and clinical data cannot be linked to a specific person in any way and from them it is not possible to identify a specific person, then there is no need for the student to obtain work permits.
- 3.16. The Student prepares the Final thesis honestly and independently, without violating the Law of the Republic of Lithuania on Copyright and Related Rights, and in compliance with the University's Code of Ethics, and in compliance with these Recommendations.
- 3.17. The work is considered as plagiarism if it is entirely or partially written by another author and without suitable referencing or in other forms violates the Law on Copyright and Related Rights of the Republic of Lithuania.
- 3.18. The supervisor consults the student on various methodological issues during the Final thesis writing period. The communication between student and his supervisor or other authorities is legal and lawful if using the e address of Vilnius university mail.

4. STRUCTURE, CONTENT AND LENGTH OF THE FINAL THESIS

- 4.1. The research work must be clearly structured. The titles of its parts depend on the nature of the work.
- 4.2. The following parts are necessary for the **descriptive type** of research work: title page, summary, keywords, introduction, description of a clinical case or case series, discussion, conclusions, recommendations, references.
- 4.3. **Analytic type** of work should include: title page, summary, keywords, introduction, patients and methods, results, discussion, conclusions and recommendations, references.
- 4.4. **Summary** should be in English and should not contain abbreviations; it should be of 200-250 words length. At the end of the summary the keywords corresponding to the topic of the research should appear.
- 4.5. **Introduction** indicates the relevance/hypothesis of the problem with the goal and the objectives of the research. Usually the goal of the research is to solve one theoretically and/or clinically relevant question. The goal must be specific. The goal can be divided into objectives. For the clinical cases or case series, the formulation of the objectives is not required.
- 4.6. If **clinical cases** or **case series** were chosen, they should clearly, but concisely reflect the course of the disease, peculiarities, laboratory and instrumental examination, outcome, prognosis (if applicable), observation findings and recommendations. Normal ranges of laboratory tests and their units are mandatory.
- 4.7. If the **analytic type** of research work is prepared (cross-sectional analytical study, cohort study, case control study, experimental study (with laboratory animals or humans)) the **patients and methods section** should be provided. In this section the computer programs and statistical methods used to calculate the results should be also stated.
- 4.8. **Results** should be presented in descriptive and comparative manner. If the results are presented in tables, only the essential findings may be repeated in the text. Tables or pictures must be clear and understandable without the text.
- 4.9. **Discussion** critically evaluates what has been done on the subject in the world. The search for literature is recommended in accordance with the Center for Evidence Based Medicine <http://www.cebm.net/> search strategy, available at <http://www.cebm.net/category/ebm-resources/tools/finding-the-evidence/>. It is desirable to indicate the literature search strategy and literature analysis in the results chapter starting with the highest level of evidence (3).
- 4.10. The research work ends with **Conclusions** and **Recommendations**. The findings must be specific and reflect the goals and objectives of the research. Abbreviations are not allowed.

- 4.11. **References** and data sources are mandatory in the Final thesis. The references are shown in brackets. The bibliography is based on the Vancouver system and the uniform requirements for manuscripts in biomedical magazines (4). In the text the references are laid out in citation order. References should not exceed 20 sources. It is recommended to cite most recent publications.
- 4.12. In order to avoid errors in the literature list, it is recommended to use one of the bibliography management programs: *Zotero*; *RefWorks* etc.

5. TECHNICAL REQUIREMENTS FOR FINAL THESIS

- 5.1. Scientific research work should be written in a fluent English language, without grammar, style, or proofreading mistakes. The work must be printed on a A4-size white paper on one side and bound in.
- 5.2. The research work should fit into 20 - 25 pages printed in 12 Times New Roman characters in 1.5 intervals. If there is a need to add more material it is recommended to add it in attachments.
- 5.3. Pages are numbered in the lower right corner of the page. Title page is not indexed. Numbering starts with a summary. An example of a title page is provided in **Annex 4**.
- 5.4. Enough space should be provided at the margins of the page: 30 mm to the left, 10 mm to the right, 20 mm to the top and bottom.
- 5.5. Section titles are capitalized. The new section follows the previous on the same page and without blank space.
- 5.6. Each table and picture must be titled. The titles of the tables and their numbers should appear over the table (for example, Table 1). Explanations and abbreviations should be indicated at the bottom of the table.
- 5.7. The titles and numbers of the diagrams or the pictures are given at the bottom of the figure (for example, Figure 1).
- 5.8. Figures and tables are numbered separately in an order, as they appear in the text.
- 5.9. The number of abbreviations should be minimized; the full term is given in the text along with the first abbreviation. There should be no abbreviations in the title, summary and conclusions.

6. SUBMISSION OF FINAL THESIS FOR ASSESSMENT AND DEFENCE PROCEDURE

- 6.1. The completed work in pdf format should be submitted to the Department/Clinic, with a properly filled in cover page as indicated in **Annex 4** and **not later than May 10**. The Final

thesis should be registered in the journal (**Annex 5**). No original signatures are needed. The student is fully responsible for the supervisor's familiarity with the final version of the work. No printed copies are required.

- 6.2. Heads of clinics or their authorized persons must confirm the fact of the student's receipt of the work by replying to him by e-mail.
- 6.3. Correspondence between students and Departments / Clinics / Institutes' staff or supervisors must be carried out through the university emails. Communication outside the university post can be ignored.
- 6.4. The Head of Department/Clinic appoints one reviewer who reviews and evaluates the Final thesis using the approved form (**Annex 6**) and returns back to the Head of the Department/Clinic.
- 6.5. The Head of the Department/Clinic organizes the Defence committee group consisting of four members and the chairman. The list of Defence committee members should be sent to Administrator.
- 6.6. The Head of the Department/Clinic passes on the Final theses and their reviews to the chairman of the respective Defence committee not later than 5 working days before the approved defence date.
- 6.7. Only those who have completed the whole study program can defend the Final thesis. Whether the study program was completed is determined by the Vice-dean of the Medicine faculty.
- 6.8. The Dean of the Faculty by his order, allows to defend the Final thesis that meet the following requirements:
 - 6.8.1. The Final thesis is submitted and registered at the Department/Clinic
 - 6.8.2. The supervisor of work got acquainted and verbally agreed to the final version of the final work
 - 6.8.3. If the Supervisor states that the Work is not properly prepared and cannot be defended, the Student has the right to apply to the Defence committee with a request to allow the defence procedure. The application and the final work must be submitted by the Student to the Defence Committee not later than within one working day from the decision to refuse to accept the Research work. After considering the Student's arguments, the Commission decides whether to allow the Student to defend his Final thesis or not.

7. THE DEFENCE OF THE FINAL THESIS

- 7.1. The evaluation of the Final thesis follows the description of the subject curriculum of the relevant study program, and these Recommendations, and the criteria established in the procedure for the assessment of the University's study achievements.
- 7.2. Evaluation and defence of the Final thesis:
 - 7.2.1. The defence of the Final thesis takes place at the Defence Committee meeting during the examination session in spring, which is determined by the Order of the Dean (**Annex 7**).
 - 7.2.2. At the request of the supervisor or the Head the Department/Clinic or the chairman of the study program, a research work whose results should not be openly accessed can be defended at a closed meeting of the Defence Committee. The Defence Committee announces a part of the meeting closed then.
 - 7.2.3. Participants in a closed defence, if necessary, sign a confidentiality agreement. In addition to the Members of the Defence Committee and the Student, the closed session of the Final Thesis defence is open to the Supervisor and Reviewer (**Annex 8**).
 - 7.2.4. During the defence procedure the author of the Final thesis briefly presents the results of the research work, the content of which depends on the type of the work chosen: analytical or descriptive. During the defence the topic of the Final Thesis cannot be questioned. The duration of the presentation is up to 10 min., usually in slides.
 - 7.2.5. After the presentation and answers to questions raised, the reviewer expresses his opinion on the Final thesis. If the reviewers are not able to attend the Defence procedure, their written comments are read by the Chairman of the Defence committee.

8. EVALUATION OF THE FINAL THESIS

- 8.1. The Final thesis is evaluated by the Defence committee.
- 8.2. The Defence committee follows the Rules of Final thesis defence, approved by the Medical Faculty, and the following Recommendations (**Annex 9**). If the Supervisor or Reviewer are within the Defence committee, they cannot vote for the decision on the final evaluation of their supervised or peer-reviewed work.
- 8.3. The members of Defence committee should follow the evaluation format given in these Recommendations. The comments can be written in preferred language (English or Lithuanian). When evaluating the Final Thesis, it is also recommended to take into account the Presentation itself, the author's answers to the reviewer and to the members of the

Defence committee, the evaluation proposed by Reviewers, the correctness of language, style as well as other evaluation criteria provided in these Recommendations.

- 8.4. The final work is evaluated by each member of the Defence committee, and then the average of the assessments of all the members is derived. The final evaluation of the Final thesis must be endorsed by the entire Commission, the decision should be adopted by a simple majority. If the opinions of the members disagree, the evaluation of the Final Thesis is based on the assessment proposed by the Chairman of the Defence committee.
- 8.5. After the defence procedure, the final works (in electronic form) and the documents are stored at the Department/Clinic for five years.
- 8.6. Student, who failed at the Defence or missed the Defence procedure, is expelled from the University.
- 8.7. The student is allowed to defend the Final thesis after resuming the studies in the next year.
- 8.8. If failing for the second time, a new Final thesis must be prepared after the renewal of the studies.

9. FINAL COMMENTS

These Recommendations come into force after their approval at the Council of the Faculty of Medicine and from the date set in the meeting.

10. REFERENCES

(recommended to read before starting writing the research work)

11. ANNEXES

Annex 1. For staff

Katedra/ Klinika _____

	Baigiamojo darbo temos pavadinimas (English title)	Vadovo Vardas Pavardė	Vadovo pareigos Medicinos Fakultete
1.			

Annex 2. Write the application in capital letters, enter your name, surname, group, title of the topic, your Supervisors' position, first name, surname and position of consultant (if any), first name and surname.

APPLICATION
DIRECTOR OF THE INSTITUTE _____

201- -

Concerning the Final thesis

Allow me, _____, to write the Final thesis under the

title, _____

and under the supervision of _____

at the Department/Clinic _____

Students' signature _____, email address _____, group _____

Annex 3. Write the application in capital letters, enter your name, surname, group, title of the topic, your Supervisors' position, first name, surname and position of consultant (if any), first name and surname.

APPLICATION
DIRECTOR OF THE INSTITUTE _____

201- -

Concerning the Final thesis

Allow me, _____, to write the Final thesis under the

title, _____

and under the supervision of _____

at the Department/Clinic _____

Students' signature _____, email address _____, group _____

Signature of the Supervisor _____

Annex 4.
VILNIUS UNIVERSITY
MEDICAL FACULTY

The Final thesis

(title)

Students' (name, surname), group _____

Department/ Clinic (where the defence procedure is taking place)

Supervisor

(signature)

Consultant (if applicable)

(signature)

The Head of Department/Clinic

(signature)

Registration day at Department/Clinic _____

(filled in by technical assistant of Department/Clinic)

Registration n. _____

(filled in by technical assistant of Department/Clinic)

201...

Annex 6. For staff

Recenzija

Baigiamojo darbo pavadinimas _____

Baigiamojo darbo autorius _____ grupė _____, metai _____

Baigiamojo darbo vertinimas

	Balai									
	10	9	8	7	6	5	4	3	2	1
Techninis/vizualinis apiforminimas: Lentelių ir paveikslų aiškumas; Atitikimas literatūros citavimo reikalavimams, tekstas be gramatinių ir stiliaus klaidų										
Santrauka Atspindėta darbo esmė										
Įvadas Pagrįsta darbo idėja/hipotezė, suformuluotas aiškus tikslas										
Klinikinio atvejo/atvejų aprašymas (glaustas anamnezės, tyrimų duomenų, ligos ir gydymo eigos, išėties, prognozės (jei tinka) pateikimas) arba Analitiniam darbams (tinkamas tiriamųjų ir tyrimo metodų aprašymas; rezultatų glaustumas, aiškumas, nėra pasikartojimų, tinkamas lyginamųjų metodų naudojimas)										
Aptarimas (paaiškinta literatūros paieškos strategija ir susieta su klinikiniu atveju)										
Išvados ir pasiūlymai (aiškumas ir konkretumas)										

Papildomos pastabos _____

Galutinis recenzento balas _____

Recenzento V.Pavardė, pareigos _____

Annex 7. For staff

Gynimo komisijos sudėtis ir gynimo procedūros vieta bei laikas

Katedra/ Klinika _____

Vieta ir Auditorijos nr. _____, laikas: (data ir val.) _____

	Pavardė Vardas	Pareigos Medicinos Fakultete	
1.			Pirmininkas
2.			Narys
3.			Narys
4.			Narys
5.			Narys

Prašome įrašyti gynimo procedūros adresą, auditorijos nr., gynimo pradžią, Komisijos pirmininką ir narius

Annex 8. For staff

KONFIDENCIALUMO ĮSIPAREIGOJIMAS

20 ____ m. _____ d.,
Vilnius

Aš, _____, a. k. _____,
(vardas pavardė)

adresas: _____,

darbovietė: _____

veikdamas kaip _____
(darbo vadovas, recenzentas, kalbos specialistas, ataskaitos vertintojas (dėstytojas), kita (rašykite))

turėsiu galimybę susipažinti su Vilniaus universiteto (studijų programos pavadinimas, studento vardas, pavardė, kursas) baigiamuoju darbu [„darbo pavadinimas“] (įskaitant tarpinius darbo rezultatus ar bet kokias darbo dalis) (toliau – **Baigiamasis darbas**).

Man yra žinoma, jog Baigiamąjį darbą studentas(-ė) parengė (pavadinimas)(toliau – **Bendrovė**), pasinaudodamas Bendrovei priklausančia įranga ir žiniomis.

Aš suprantu, kad Baigiamasis darbas ir visos su Baigiamuoju darbu susiję bei man perduotos ar mano sužinotos žinios ir/ar informacija yra konfidenciali ir sudaro Bendrovės komercinę paslaptį (toliau – **Konfidenciali informacija**), todėl po susipažinimo su Baigiamuoju darbu, įsipareigoju:

1. Saugoti ir nepagarsinti žinių, sudarančių Bendrovės Konfidencialią informaciją, kurios man yra iš anksto patikėtos arba tapo man žinomos Baigiamojo darbo peržiūros metu.
2. Neperduoti ar jokių kitu būdu neatskleisti Konfidencialios informacijos jokiems tretiesiems asmenims ir viešai jos neskelbti be išankstinio Bendrovės raštiško sutikimo.
3. Nepanaudoti Bendrovės Konfidencialios informacijos asmeniniais tikslais.
4. Pasibaigus pagrindui, kuriuo man buvo suteikta galimybė susipažinti su Baigiamuoju darbu, nepasilikti jokių man pateiktų Baigiamojo darbo ar kitų dokumentų (įskaitant elektronines laikmenas) kopijų.
5. Pranešti Bendrovei apie visus pašalinių asmenų siekius sužinoti Bendrovės Konfidencialią informaciją.
6. Saugoti kitų organizacijų ar įmonių, su kuriomis Bendrovė palaiko dalykinius ryšius, ar kurios yra susijusios su Bendrove valdymo ryšiais (grupės įmonės), konfidencialią informaciją ir komercines paslaptis, jei tokia informacija buvo man atskleista ar perduota.
7. Šis įsipareigojimas galioja neterminuotą laikotarpį nuo jo pasirašymo dienos.

Aš perskaičiau ir supratau šį tekstą bei jį pasirašydamas aš įsipareigoju vykdyti visas šio Konfidencialumo įsipareigojimo sąlygas. Esu įspėtas, kad, jei man pažeidus šį įsipareigojimą, Bendrovei bus padaryta žala, turėsiu ją atlyginti Lietuvos Respublikos teisės aktų nustatyta tvarka.

vardas, pavardė, parašas, data

Annex 9. For staff

Komisijos nariai vadovaujasi šiuose Metodiniuose nurodymuose pateikta vertinimo sistema

Vilniaus universiteto Medicinos fakulteto medicinos studijų programos

Baigiamojo darbo rekomenduojama vertinimo sistema

Baigiamojo darbo pavadinimas _____

Baigiamojo darbo autorius _____ grupė _____, metai _____

Darbo vertinimas balais _____

Baigiamojo darbo vertinimo gairės

Komisijos narys vertina darbą 10 balų vertinimo sistemoje: 10 – puikiai; 9- labai gerai; 8- gerai; 7 – vidutiniškai; 6 – patenkinamai; 5 balai – silpnai; 4 – 1 balas – nepatenkinamai.

Baigiamojo darbo vertinimo gairės

	Balai									
Techninis/vizualinis apiforminimas: Lentelių ir paveikslų aiškumas; Atitikimas literatūros citavimo reikalavimams, tekstas be gramatinių ir stiliaus klaidų	10	9	8	7	6	5	4	3	2	1
Santrauka Atspindėta darbo esmė	10	9	8	7	6	5	4	3	2	1
Įvadas Pagrįsta darbo idėja/hipotezė, suformuluotas aiškus tikslas	10	9	8	7	6	5	4	3	2	1
Klinikinio atvejo/atvejų aprašymas (glaustas anamnezės, tyrimų duomenų, ligos ir gydymo eigos, išėties, prognozės (jei tinka) pateikimas)	10	9	8	7	6	5	4	3	2	1

arba Analitiniams darbams (tinkamas tiriamųjų ir tyrimo metodų aprašymas; rezultatų glaustumas, aiškumas, nėra pasikartojimų, tinkamas lyginamųjų metodų naudojimas)										
Aptarimas (paašškinta literatūros paieškos strategija ir susieta su klinikiniais atvejais)	10	9	8	7	6	5	4	3	2	1
Išvados ir pasiūlymai (aiškumas ir konkretumas)	10	9	8	7	6	5	4	3	2	1
Prezentacija (aiški, vizualiai patraukli)	10	9	8	7	6	5	4	3	2	1