

Approved at the meeting.
of the Faculty of Pharmacy Council
on 03/17/2022, protocol no. FF 17-13

Updated at the meeting.
of the Faculty of Pharmacy Council
on 05/23/2024, protocol no. FF 24-4

**LITHUANIAN UNIVERSITY OF HEALTH SCIENCES
FACULTY OF PHARMACY**

**Integrated studies of
PHARMACY**

PROGRAMME

**REGULATION FOR FINAL MASTER THESIS
PREPARATION AND EVALUATION**

Kaunas, 2023

I. GENERAL PROVISIONS

1. The Regulation establishes the main concepts, statements and procedure for the preparation and defense of final master's theses in the Faculty of Pharmacy of the Lithuanian University of Health Sciences (LUHS).
2. This Regulation is prepared based on the following legal acts:
 - 2.1. An order of the Minister of Education and Science of the Republic of Lithuania "Regarding general requirements for study programs". 2005, July 22. No. ISAK-1551.
 - 2.2. An order of the Minister of Education and Science of the Republic of Lithuania "Regarding the approval of the description of the requirements for conducting general studies". 2016, December 30. No. V-1168.
 - 2.3. Law on Science and Studies of the Republic of Lithuania. 2009, April 30. No. XI-242.
 - 2.4. Order of the Minister of Education and Science of the Republic of Lithuania "Regarding the procedure for crediting study results". 2003, November 12. No. ISAK-1603.
 - 2.5. LUHS Study Regulations (LUHS Senate Resolution No. 120-04 of June 20, 2019; current version).
 - 2.6. "Provisions for the preparation, submission and uploading of electronic documents of master's theses, doctoral dissertations or monograph summaries of LUHS and uploading them to the information system of Lithuanian science and studies electronic documents, as well as the procedure for use" (approved by Resolution No. 5-02 of the Senate of LUHS dated by January 21, 2011).
 - 2.7. Order of the Minister of Education and Science of the Republic of Lithuania "Description of General Requirements for master's degree Programs" approved by the order no. V-826 from June 3, 2010.
 - 2.8. Decree of the Rector of LUHS approved on May 2, 2011, No. 7-1 "Provisions for the Lithuanian University of Health Sciences on the scoring of study results of students who have studied in foreign institutions of higher education under the LLP/ERASMUS Exchange Programme".
 - 2.9. Decree of the Senate of Lithuanian University of Health Sciences approved on May 27 No. 9-08 "Provisions on the evaluation of study results in the Lithuanian University of Health Sciences".
 - 2.10. Regulation on the preparation of final Master thesis in the Faculty of Pharmacy of Lithuanian University of Health Sciences. Kaunas, 2019.

II. MAIN CONCEPTS, FUNCTIONS, DUTIES AND RESPONSIBILITIES

3. **Final Master Thesis (FMT)** - the individual scientific research and written analysis conducted by a Master student, relevant to the Pharmacy study programme. The FMT thesis demonstrates the Master student's ability to carry out scientific research, to analyse data, to make use of scientific knowledge while solving a scientific objective, to apply and develop original scientific research concepts and to describe the phenomena or regularities of new discoveries. The FMT should demonstrate the Master student's intellectual maturity and preparation for the autonomous research and practical activities.

4. **Master student** - a student, enrolled in the Integrated Master Studies Programme in the Lithuanian University of Health Sciences and preparing the FMT. Master student can present his FMT for the evaluation only after completion of all academic requirements of the selected integrated studies. The rights, duties, and responsibilities of a Master student during the preparation and presentation of the FMT are as follows:

- 4.1. To select a topic for the FMT in time, at a particular department of the Faculty of Pharmacy of Lithuanian University of Health Sciences.
- 4.2. To prepare an individual plan of works and schedule for development of the FMT (see Annex No. 1) and to be consistent with the agreed deadlines; to submit a report for supervisor at the end of each semester (see Annex No. 2).
To collaborate with the FMT supervisor discussing the work progress and problems.
- 4.3. According to the schedule, to present the initial draft of the FMT to the supervisor and correct it

according to the supervisor 's recommendations.

4.4. To submit the final version of FMT to the qualification commission (QC) at the specified time.

4.5. If needed, to participate in the discussion regarding FMT during the QC meeting.

4.6. To inform the QC and present confirmation if the FMT or it 's part has been presented publicly in the scientific conferences and/or published in scientific journals or proofs that the research and experimental development (R&D) activities were carried out under collaboration with a social partner or a scientific project during the preparation of the FMT.

4.7. According to the schedule, submit the finalized FMT to the department, to present it in the meeting of the department herewith submit FMT to QC.

4.8. If the FMT supervisor, or the department, or the topic of the FMT are to be changed, an official application for performed changes must be submitted to the head (-s) of the department (or both departments). The student must clearly and reasonably justify the application. When changing the supervisor or consultant, it is necessary to submit the consent of the new supervisor or consultant.

4.9. To comply with other requirements set out in the Senate Decree of the Lithuanian University of Health Sciences "Policy for the preparation, submission and uploading of electronic documents of master's theses, doctoral dissertations or monograph summaries to Lithuanian science and study documents databases and regulations procedures".

5. Supervisor for the Final Master Thesis - a person who has a PhD degree. Candidacy for supervisors for the Final Master Thesis must be approved during the meeting of each department.

Duties and functions of a supervisor for the Final Master Thesis:

5.1. To propose the marster theses research topics to the department.

5.2. To assist the Master student in formulating a topic, aim, objectives of the FMT and in creating an individual plan and time schedule for the FMT according to the number of credits in the programme of pharmacy which must be presented to the Department (see Annex No. 1).

5.3. To recommend literature necessary for the completion of the FMT.

5.4 To discuss the FMT methodology with the student.

5.5. To advise the Master student and, if necessary, to recommend a consultant from the related scientific fields.

5.6. To consistently monitor the development of the FMT, to help solve arising problems.

5.7. To provide recommendations and notes for the development of the FMT.

5.8. To assist the Master student to discuss and interpret experimental data.

5.9. To discuss the presentation of the Master student prepared FMT.

5.10. If needed, to participate in the QC meeting.

5.11. To participate in the department meeting for the discussion of the FMT and present recommendation about the eligibility/non-eligibility for the public FMT presentation.

5.12. To evaluate the Master student 's participation in the FMT preparation process (see Annex No. 3) and confirm that there is no reason to reasonably doubt that the student 's FMT has been completed and written independently, without prejudice to the copyright of others (see Annex No. 15).

5.13. To check the text of the FMT submitted by the student with text matching software (Oxsico or other specified) subscribed and administered by the University, to assess whether the text does not contain attempts to infringe the copyrights of other persons. The overlap of the work text cannot exceed 30 percent. A text match report generated by the data verification software is provided to the department along with the supervisor's assessment report.

5.14. The supervisor's assessment (see Annex No. 3) may be negative, in which case the department considers and decides whether to allow the student to provide work for public defense.

6. Consultant for the Final Master Thesis - a person who has a master's degree and giving advice on the preparation of FMT. Candidacy for consultants must be suggested by FMT supervisor together with student for the consideration at the meeting of the department.

7. Qualification Commission (QC). For the preparation and presentation of the FMT, the QC is formed from not less than from five persons working in the programmes of the Faculty of Pharmacy of Lithuanian University of Health Sciences. The composition of the QC is approved by the council of Faculty of Pharmacy (FPh) at the proposal of the head of the study program. QC composition is approved

for three years. If necessary, the composition of QC can be changed. The composition of the QC is approved by the FF council during the first meeting in September.

The QC duties:

- 7.1. To organize the methodological seminar to introduce master's students on FMT preparation.
- 7.2. To evaluate the suitability of the FMT for the review and public presentation.
- 7.3. To appoint the FMT reviewers.
- 7.4. To solve other controversial questions related to FMT preparation.
- 7.5. To execute other duties in accordance with Rector's order no. 2021-V-0699 (December 12, 2021) approved procedures.

8. Reviewer - a scientist who grades the FMT according to the criteria. The list of the reviewers is composed by the dean's office, departments conducting studies of the Pharmacy program and the final one - by QC.

Reviewer 's duties:

- 8.1. To evaluate if the work complies the criteria for the FMT.
- 8.2. A week before the FMT defending, the reviewer presents the evaluation (in points) to the chairman of QC according to the form adopted by the Council of the Faculty of Pharmacy (see Annex No. 4). Reviewer signs the title page of the FMT (see Annex No. 10). Master student has a right to access the review. A reviewer should send an electronic PDF version of a review via officially approved university e-mail to QC and a student or uploads to another specified electronic database no later than 3 days before the final thesis defense. Master student must be prepared to answer the reviewer's questions or explain the indicated shortcomings of the work during the defense.
- 8.3. In the case of negative review, one more reviewer is nominated. Master student has a right to access the review not later than 1 day before the FMT defense. If the finalised FMT, approved by the department, according to reviewer evaluations does not comply with the FMT formal requirements and can not be defended, the chairman of the Commission writes the notification to the Dean of the Faculty of Pharmacy.
- 8.4. To evaluate whether there are reasonable doubts as to whether a student 's FMT is written, without prejudice to the copyright of other authors.

9. FMT Defense Commission - the commission of at least 11 members nominated by the Dean of the Faculty of Pharmacy and approved by the Rector. It is required that not less than 7 of the Commission members - assessors would be from profile/specialty departments; not less than 1 competent scientist in the field of pharmacy studies; not less than 1 pharmaceutical practitioner who has completed the integrated study program; not less than 1 representative of other social partners. At least one member of the Commission (especially recommended - the chairman of the commission) must be from the other research and studies institution than that where Master student has studied.

FMT Defense Commission duties:

- 9.1. To organize public FMT defense and to participate in it.
- 9.2. The chairman of Commission distributes the FMT for the Commission members to get acquainted with them at least 5 working days before the public defense.
- 9.3. Each member of the Commission reviews the FMT and evaluates their presentations according to the evaluation form approved by the Council of the Faculty of Pharmacy (see Annex No. 5).
- 9.4. To calculate additional score for scientific publications and the research and experimental development (R&D) activities (see Annex No. 6).
- 9.5. To calculate the overall score for the defending of FMT.
- 9.6. To provide the proposal regarding granting of the Master 's degree.

10. Appeal Commission is formed in accordance with the procedure described in the LUHS Study Regulation (valid version). The members of the Appeals Commission are advised to participate in the final thesis defense.

III. SCHEDULE FOR THE PREPARATION AND PRESENTATION OF THE FINAL MASTER THESIS

No.	<i>Master Thesis preparation stages</i>	<i>Deadline, months</i>	<i>Activity details</i>
<i>Year III</i>			
1	Discussion and announcement of topics	VI semester, April	<p>Topics are discussed and approved at the departments. The goal of the discussion – to avoid later remarks about the topic feasibility, relevance and potential benefits of the results. Every topic should be discussed in the department meeting and if it is decided that the topic is not suitable for any reasons, the participants of the meeting should propose other alternative topics. The topic categories should be nominated in the list of consolidated topics. The list of approved topics is submitted to the Dean’s Office of the Faculty of Pharmacy. Note: if the topic or supervisor changes during FMT preparation, departments inform the FPh Dean's Office within 1 month. If the student has previously agreed with the supervisor on the topic of the master's thesis and conducts research on this subject, this is indicated in the protocol of the department meeting.</p> <p>The list of topics is publicly announced not later than 5 working days before the selection date.</p>
2	Selection of the topics for the Final Master Thesis	VI semester, May	<p>Master students choose the topics of the final thesis from the list of publicly announced topics. Master students themselves may also propose topics after consulting with a supervisor with experience in that field of research. The student must inform the supervisor about the choice of his / her topic until the end of the VI semester.</p>
<i>Year IV</i>			
3	Information of the Master students about workflow of Master Thesis preparation	VII semester, September	<p>QC organizes methodical seminar where Master students are informed about preparation of the FMT.</p>
4	Approval of the Supervisors and Master Thesis topics at the Department	VII semester, until October 15th	<p>Under assistance of the supervisor, the Master student prepares a plan for carrying out the research work (formulates goals, objectives and expected results) and submits a written plan of 1-2 pages, signed by the student and supervisor, for consideration in the department (see Annex No. 1). The approved plans are kept in the department until the defense of the work.</p>
5	Study of the scientific literature	VII semester	<p>The student carries out a theoretical investigation of the topic: he collects literature related to the topic and begins literature analysis. At the end of the semester, the student gives the supervisor a list of literature and a short preliminary analytical literature review, expresses his/her attitude towards the questions being investigated.</p>
6	Scientific literature analysis, research organization and progress	VIII semester	<p>The student further analyses literature and interprets the discovered scientific claims; he/she composes the theoretical part of the thesis and explain the study methodology. At the end of the semester, Master student submits a preliminary literature review to the supervisor. The data collection or experimental study</p>

			is planned and organized.
<i>Year V</i>			
8	Study organization and process	IX semester	The data collection or experimental study is continued. The theoretical and practical value of the obtained results is discussed. Results are systematised and analysed. At the end of the semester, research methodologies, research results and their summary are presented.
9	FMT finalisation/ presentation	X semester	The FMT is written. The finalized work is presented to the supervisor, discussed at the department where the work has been prepared. The protocol of the departmental meeting, together with the electronic version of the FMT, the text overlap report and the supervisor's evaluation, is submitted to the FMT Defense Commission. After appointing the reviewers, the student places the electronic version of the FMT in the system approved by the LUHS library, submits the printed master's thesis to the Qualification Commission.

11. Master student prepares the FMT independently, in accordance with the requirements for the FMT approved at the Faculty of Pharmacy (see Annex No. 8). During the FMT preparation it is recommended to make an oral presentation/thesis at the scientific conference. During the work preparation, Master student must present accomplished tasks as foreseen in the individual work plan to his supervisor by filling a report about FMT preparation at the end of each semester (see Annex No. 2) and get a credit. The finalised Master 's Thesis is signed by the supervisor on the second title page of the final work (see Annex No. 10).

12. The FMT is presented to the department not later than 1 month before the public Master 's Thesis defence date foreseen in Study plan. Before submitting work to the department, the supervisor revises the Thesis. The FMT shall be presented to the supervisor not later than 10 working days before the start of department approval process. If the FMT is not properly prepared, the supervisor indicates the deficiencies and recommends that the student corrects them within 1 week. The supervisor evaluates the student's participation in the preparation of the FMT (see Annex No. 3) and presents the assessment at the meeting of the department. In the case of a negative assessment by the supervisor, the suitability of the work for public defense is considered and approved by the department.

13. The public defending of the Master Thesis is organized at the department (time and place is announced in the Message Board of the Department, Moodle, or other official university electronical environment). FMTs are considered and approved (not approved) at the department meeting. After the FMT is approved for public defense, the student submits the final electronic PDF version of the thesis to the department. Not later than 2 weeks before the public defense of the Master 's Thesis in the Evaluation Commission, the Department submits a protocol of the department meeting with a list of students who are a) recommended to defend the FMT, b) not recommended to defend the FMT, to the QC of the Faculty of Pharmacy. The department uploads the FMT electronic PDF versions to the virtual electronical environment (MS Teams or others) created by the FMT Defense Commission.

14. The student submits one paper copy of the thesis to the QC, which must contain the signatures of the master's student, supervisor, consultant (if any); the number of pages and approval of the Center for Bioethics is required. The QC transfers the theses that meet the requirements to the FMT Defense Commission. Final theses can be defended by master's students who have completed the entire study program.

15. QC appoints a reviewer. Within two working days after the appointment of the reviewer, the master's student must upload the final thesis in a repository approved by the LSMU library (CRIS or another specified). The reviewers submit electronic PDF versions of the reviews to the QC and the master's student by e-mail approved by the university no later than 1 week before the MBD defense date (see Annex No. 4) and place the printed review in the paper copy of the final thesis. QC forwards reviews to the FMT Defense Commission, and in case of a negative evaluation, re-review is ordered. Permission to defend at the request of the dean is formalized by order of the Rector.
16. The date for the FMT defense and the composition of FMT Defense Commission is appointed by the Rector at the request of the Pharmacy faculty Dean.
17. The date of FMT public defense is announced no later than 30 calendar days before the scheduled defense dates. The public defense of the master's thesis is mandatory.
18. The Secretary of FMT public defense Commission presents the paper version of the FMT thesis to the members of the FMT public defense Commission at the FMT public defense.
19. At the final theses defense session, master students deliver a prepared final thesis presentation, which indicates the university and its department where the thesis was prepared, the author of the thesis, supervisor, and consultant (if any), topic, purpose, tasks, research methodology and methods, results, and conclusions, practical recommendations may also be presented. Up to 10 minutes are allotted for the master's student's presentation. After that, the student answers the comments and questions of the reviewer (if the paper was evaluated by two reviewers - both reviewers) and those participating the meeting.
20. In the FMT defending meeting, the members of the FMT public defense Commission evaluate every work according to the criteria set out in the Council of the Faculty of Pharmacy and fill the form for the evaluation (see Annex No. 5). A FMT public defense is considered legitimate if at least half of the FMT public defense Commission members participate in it.
21. If the supervisor or reviewer of the thesis is a committee member or chairperson, he must recuse himself from the evaluation procedures of that master's thesis and its defense.
22. The final assessment of the thesis consists of the supervisor's (30 %), the reviewer's assessment (30 %), and the average of the FMT public defense Commission assessment (40 %), as well as additional points for publicity and R&D activities (see Annex No. 6). If the paper was evaluated by two reviewers, the average of their evaluations is output.
23. The topic of the final thesis and the final evaluation grade are recorded in the protocol of the FMT public defense Commission, in the electronic input of the final thesis defense.
24. If, during the preparation and defense of the thesis, academic dishonesty is detected, the supervisor of the thesis, the reviewer, or the FMT public defense Commission member(s) write an official report to the dean. The dean forms a three-person commission to make the final decision. Non-independent (plagiarized) work is a work in which part, or all the work is written by another author (completely rewritten paragraphs or pages of another author's work without reference to authorship); copyright of other authors is violated in the work. If the commission confirms the fact of the student's dishonesty, the master's thesis defense is not allowed or the defense is not counted. At the master's student's request, the Rector may allow the thesis to be defended no earlier than one year later for a set fee.
25. The assessment of the public defense of FMT must be positive. An undefended master's thesis, evaluated with less than 5 points, is considered as academic debt, and the student is removed from the student list.
26. Master student who 's enrollment in the University was cancelled (not due to the dishonest behavior) could apply for the Rector 's permission to defend the FMT not earlier than after two months and after the payment of the appropriate fee.
27. If the student disagrees with the FMT evaluation, the student has to the right to appeal to the Dean of the Faculty of Pharmacy within 1 working day (see Annex No. 7). The appeals are dealt with in accordance with the procedure described in the LUHS Study Regulation (approved by the LUHS Senate Resolution; valid form).

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INDIVIDUAL SCHEDULE PLAN FOR THE FINAL MASTER 'S THESIS

Intergrated pharmacy study program IV course..... student

The duration of preparation of the master's final thesis from 20..... y..... month till 20..... y.
..... month.

Supervisor.....

(scientific title, name, surname)

Consutant (-s) [if any].....

(scientific title, name, surname)

Master thesis topic:

Thesis is prepared: (ful name of the department)

Aim of the thesis:

Objectives:

Object:

Methods:

Expected results:

Semester (according the study)	Scheduled tasks	Presentation of the thesis at the conferences, scientific publications
VII		
VIII		
IX		
X		

Supervisor and the thesis topic were approved.....

(full name of the LUHS department and full name of the institution if it is not LUHS) (protocol No. 20..... y. month day)

Student's name, surname signature, date _____

Supervisor's name, surname signature, date _____

Chief of the department name, surname signature, date _____

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LUHS Pharmacy Integrated Master 's Studies Programme

..... course student.....

Master Thesis Preparation Report

Semester

<i>Title of Master Thesis</i>	
<i>Supervisor</i>	
<i>Report Period</i>	from dd/mm/yyyy to dd/mm/yyyy
<i>Scheduled tasks in individual plan</i>	1. 2.
<i>Written parts / sections of Master 's Thesis (Their titles, <u>electronic versions must be sent to supervisor by e-mail</u>)</i>	
<i>Fulfilled experimental tasks, main results</i>	
<i>Participation at the conferences, seminars, title of thesis (place and date), publications</i>	

(Student 's name, surname, signature, date)

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EVALUATION OF THE FINAL MASTER 'S THESIS

EVALUATION OF SUPERVISOR

Pharmacy Studies Programme student

Title of master 's thesis:
.....
.....

No.	Final work evaluation questions	Highest possible grade	Evaluation
1	Ability to prepare a work plan independently (aim, objectives, workflow) and to follow it, to submit FMT reports in time	2	
2	Ability to analyze scientific literature, systematize data and apply it at work	2	
3	Ability to do research independently, to offer creative solutions	2	
4	Ability to analyze the obtained research results, evaluate them and compare them with the results of other researchers	2	
5	Ability to summarize results and formulate conclusions	2	
Total			

Supervisor:

(name, surname, signature, date)

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EVALUATION OF THE FINAL MASTER 'S THESIS

EVALUATION FROM A REVIEWER

Author of thesis: Master student

Title of Master 's thesis:

Study program:

Length of thesis: No. of pages...., (No. of pages without appendixes

No. of references in the list of literature:

No. of tables:; No. of figures:; No. of annexes:

FMT parts /Aspects	No.	FMT evaluation questions	Evaluation (mark the most suitable option)		
			Yes	Partly	No
Academic dishonesty	1.	Are there signs of academic dishonesty at work? *			
Bioethics approval (if needed)	2	Is the approval of Bioethics Center received?			
Compliance with MBD requirements					
Structure	3.	Are all the structural parts in the final thesis?	0		-2
	4.	Is the final work volume of 40 pages (without appendixes)?	0		-2
	5.	Are the titles of chapters and chapters separated logically and correctly in the final thesis?	0	-0.2	-0.5
	6.	Are the most important terms and abbreviations provided (if necessary)?	0	-0.2	-0.5
Conformity of parts of FMT structure					
Summary (0.5 point)	7.	Are the summaries (in Lithuanian and English) informative and relevant to the content and requirements of the work?	0.5	0.2	0
Introduction, aim, objectives. (0.5 point)	8.	Is the relevance of the topic, research problem, aim and objectives, object, methodology described in the introduction to the work?	0.5	0.2	0
Literature review (1.6 points)	9.	Is the author's acquaintance with other scientists' works in Lithuania and the world sufficient?	0.4	0.2	0
	10.	Have the most relevant research, normative documents, and the most important results and conclusions of other researchers been properly discussed?	0.6	0.3	0

	11.	Is the review of scientific, practical literature sufficiently related to the problem at work?	0.6	0.3	0
Materials and methods (2 points)	12.	Is the methodology of work research properly explained, or is it appropriate to achieve the objective?	1.0	0.5	0
	13.	Are the test instruments (samples, study groups, selection criteria) or study materials, reagents, etc. properly described?	0.6	0.3	0
	14.	Are the used methods (including statistical or theoretical if used) properly described?	0.4	0.2	0
	15.	Are the questionnaires provided appropriately (if necessary)?	0	-0,2	-0,4
Results (2 points)	16.	Are the main results of the study, obtained by analyzing the data, provided appropriately?	0.6	0.3	0
	17.	Are the tables and figures presented according to the requirements?	0.4	0.2	0
	18.	Is the information duplicated in tables and figures?	0	0.2	0.4
	19.	Has the statistical analysis of the data been properly performed, and the results provided? <i>If it is qualitative research:</i> Is the analysis of the results properly presented when substantiating claims with quotations from respondents or observational findings?	0.6	0.3	0
Discussion of the results (1.6 points)	20.	Are the results (their importance, weaknesses) and the reliability of obtained data properly evaluated?	0.6	0.3	0
	21.	Is the discussion of the results properly performed?	0.8	0.4	0
	22.	Is the practical value of research results presented?	0.2	0.1	0
Conclusions (0.6 points)	23.	Do the conclusions reflect the theme, goal, objectives (questions) of the final thesis?	0.2	0.1	0
	24.	Are the conclusions based on the analysed material and are consistent with the results of the research?	0.2	0.1	0
	25.	Are the conclusions clear and laconic?	0.2	0.1	0
References (1.2 points)	26.	Is the bibliographic list of literature prepared according to the requirements?	0.4	0.2	0
	27.	Are references to the bibliographic list provided in the text, correct?	0.2	0.1	0
	28.	Are the sources of information correctly cited?	0.2	0.1	0
	29.	Does the bibliographic list contain nonscientific sources?	0	0.1	0.2
	30.	Do the cited sources less than 10 years old consist of at least 70 % of all provided sources in this work? For the FMT on historical pharmaceutical development topics: is there enough quotation to justify the claims made by sources less than 10 years old?	0.2	0.1	0

Additional questions that may increase the total amount of points					
Annexes	31.	Do the provided annexes contribute to the understanding of analysed subject of thesis?	+0.2	+0.1	0
Practical recommendations /suggestions	32.	Are the provided practical recommendations or suggestions regarding possible application of the results in future research realistic and practical?	+0.2	+0.1	0
General requirements, the non-compliance of which reduces the number of points					
General requirements	33.	Has the volume of work been artificially increased?	-2	-1	0
	34.	Is the work written in the correct language, in a scientific, logical, and laconic manner?	0	-0.5	-1
	35.	Are there any grammar, stylistic, computer literacy errors?	-1	-0.5	0
	36.	Is the text consistent?	0	-0.2	-0.4
	37.	Is the content (titles of chapters, subsections, and page numbering) consistent with the work structure and is correct?	0	-0.2	-0.4
	38.	Has the student provided his/her opinion on each discussed issue?	0	-0.3	-0.6
	39.	Has each chapter been ended with a summary summarizing the most important conclusions of that chapter?	0	-0.2	-0.4
	40.	Is the quality of printing, binding, and visual material of this work acceptable?	0	-0.2	-0.4
		Total:			

**Remark: If answer is positive, reviewer should not evaluate the work and write a Notification to the Dean.*

Reviewer's comments and questions:

- 1.
- 2.
- 3.

Evaluation of the Final Master's Thesis:

(position, scientific degree) (signature)

(name, surname)

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**EVALUATION OF THE FINAL MASTER 'S THESIS
EVALUATION FROM A MEMBER OF THE DEFENSE COMMITTEE**

Pharmacy study programme

Master student

Title of master's thesis:

No.	Questions for final master 's thesis evaluation	Evaluation (mark the most suitable option))		
		Yes	Partly	No
1.	Has a student clearly presented the research background and main problem?	1	0.5	0
2.	Has a student clearly presented the research aim and tasks?	0.5	0.25	0
3.	Has a student clearly presented the research methodology?	1	0.5	0
4.	Has a student clearly presented the main research instruments?	0.5	0.25	0
5.	Has a student clearly presented the main research results?	1	0.5	0
6.	Was the visual material informative and understandable?	1	0.5	0
7.	Had the presentation a logical sequence?	1	0.5	0
8.	Were conclusions presented?	1	0.5	0
9.	Are conclusions based on research results?	1	0.5	0
10.	Has a student answered clearly and correctly to the reviewers and commission questions?	1	0.5	0
11.	Work presentation culture (was the work presented in the correct language and understandable for the audience?)	1	0.5	0
	TOTAL			

Comments and arguments of the member of the final thesis commission

(Position, scientific degree)

(Signature)

(Name, surname)

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THE RULES FOR CALCULATION OF ADDITIONAL POINTS

No.	Activity	Points
Poster presentations at the conferences		
1.	Research work has been presented at the International scientific conference	0.3 (award × 2)
2.	Research work has been presented at student's conference and published in abstract book	0.2 (award × 2)
3.	Research work has been presented at other pharmaceutical, medical, chemical, biochemical, biological, biophysics or other conferences at National level or scientific exhibitions	0.1 (award × 2)
Oral presentations at the conferences		
1.	Research work has been presented at the International scientific conference	0.5 (award + 0,2)
2.	Research work has been presented at student's conference and published in abstract book	0.3 (award + 0,2)
3.	Research work has been presented at other pharmaceutical, medical, chemical, biochemical, biological, biophysics or other conferences at National level	0.2 (award+ 0,2)
Articles in scientific journals		
4.	Articles in International scientific journals with citation index at <i>Clarivate Analytics Web of Science (CA WoS)</i> database. Citation index > 1.0	1.2
5.	Articles in International scientific journals with citation index at <i>Clarivate Analytics Web of Science (CA WoS)</i> database. Citation index ≤ 1.0	1.0
6.	Articles in other peer-review scientific journals	0.5
Participation in scientific research programs and Collaboration with social partners		
7.	Scientific research was performed under collaboration with social partners	0.5
8.	Scientific research was performed under financing of scientific research program	0.5

Note: the title „International conference“ is assigned if it is stated in the conference description that it is an International conference

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EXAMPLE OF AN APPEAL

Master student 's name, surname

Title of study program

For the Rector of LUHS

APPEAL

Regarding to an evaluation of master thesis

KAUNAS

Date

The appeal text must include the student's request to consider the evaluation of the master thesis. The student must clearly and reasonably justify his request.

_____ Name, surname
(Signature)

REQUIREMENTS FOR THE FINAL MASTER'S THESIS

1. **Structure.** Title page; table of contents; summary (in Lithuanian and in one of the EU languages); abbreviations and concepts; introduction; the aims and the tasks of the work; 1. Literature review; 2. Research methodology and methods; 3. Results; 4. Discussion; 5. Conclusions; 6. Practical recommendations; 7. List of Master's publications (if available); 8. References; 9. Annexes (if required).

2. **Title page.** It must be designed as shown in Annexes No. 9 to 10. It consists of two parts, it contains the basic information about the final thesis in which faculty and in which department the work has been prepared, the author of the work, the title of the work, the study program, the position of the scientific supervisor, the degree, and the consultant (if any), the place and year of thesis preparation.

3. **Table of contents.** The content lists the titles of the work sections and subsections, indicating which page they begin with. The content page is inserted after the title pages. The numbering of chapters and sections must be indicated. The titles of the chapters in the content are written in capital letters, the sections are in lower-case letters. Each content section has its own number, the sections are numbered by two digits, separated by a dot. The sub-section consists of three digits. Numbered in Arabic numerals.

4. **Summary.** It is a chapter that briefly introduces the content of the final thesis (layout of the key materials). This section is *not numbered in table of contents*, but it is included in the total number of pages. The summary, written in Lithuanian and one of the EU languages (e.g. English Summary), is mandatory. If the work is written in non-Lithuanian language, the summary must be in Lithuanian. It is written on a separate page. The size of the summary is limited to one A4 page (2,700 characters). The beginning of the summary should contain the author's name and surname, the title of the work, the text which should include the following: the aim of the research, the object of the research or the participants of the research, methods, research results, conclusions (recommendations, if any). An example of summary is given in Annex No. 11.

5. **Acknowledgments** (optional part of the work). Sometimes, after the summary, the thanksgiving text is presented but it is not specified in the content. The author of the work can thank the persons who helped to prepare the scientific work.

6. **Abbreviations list.** Abbreviations are written on a separate page; this section is included in the table of contents without a chapter number. Familiar and frequently used terms and terms proposed by the author and their explanations should be included in the list. The first time a term appears in the text, it should be written out in full, with its abbreviation provided in brackets. Abbreviations are written without dots. Units of measurement (ml, cm) and symbols (%) are not considered as abbreviations.

7. **Terms.** This section includes specific (key) and less frequently used terms, listed in alphabetical order. This section is not numbered but it is included in the table of contents and the total number of pages.

8. **Introduction.** The recommended introduction volume is up to 2 pages (up to 5,400 characters). It briefly discusses the relevance of the topic, its' theoretical and practical significance, justifies the relationship of the chosen topic to the research methodology and results, and at the end of the chapter a single sentence clearly defines the aim of the work or the research question if a qualitative study is envisaged.

9. **Aim and objectives of the thesis.** These are the sections that can be written together or separately. The chapters indicate the directions of the research and the problems that are analysed, define the process of the research, and the research instruments. In the **AIM OF THE FINAL THESIS** section, the same aim of the work, which is written in the introduction, is repeated. Only single aim is recommended. The purpose of the **OBJECTIVES OF THE FINAL THESIS** section is to indicate how to achieve the intended aim of the research. A few objectives (3-5) are indicated, which can be carried out under the

chosen conditions. They are numbered and listed in the order of importance.

10. Literature review. It should include the research and theoretical studies conducted in Lithuania and abroad. Studies from Lithuania should be described first, followed by studies from the other countries. The number of literature sources in the work is not limited, there is only the lower limit of quoted scientific literature and the percentage of cited scientific sources not older than 10 years - it is recommended to quote at least 30 (including about 70 % of not older than 10 years) scientific publications. The exception is applied to the literature sources of historical pharmaceutical development - in this case, the number of sources older than 10 years is not limited, they can be quoted to the extent, necessary to substantiate the claims made by final thesis. It is not recommended to cite textbooks, popular magazines, and newspapers. The size of this chapter is no more than 20-25 % the total volume of the final thesis. Every chapter is recommended to be finalized by generalization of the chapter with a summary.

11. Research methodology. The following should be described: research planning (organization), research object, selection of subjects (population, sample), research methods, methods used for data analysis. If certain permissions were required, the copies of them must be provided in the annexes.

12. Results. Analysed and summarized research data should be presented. This section of the final thesis may include subsections. The results must be provided using tables and (or) figures (tables and figures should not duplicate each other). If quantitative attributes of the studied object are recorded, the methods of statistical data analysis should be included. Results of the qualitative study are provided using isolated topics which are analysed by supporting the statements with respondents' quotations or data of monitoring.

13. Discussion of the results. When discussing the results of the thesis, they must be compared to results obtained by scientists in the field (the scope from 1 to 3 pages).

14. Considering the specificity of the final thesis, the sections mentioned in paragraphs 12 and 13 may be combined. In this case the title of this section is: *Results and Discussion*.

15. Conclusions. This section presents the findings based on research results, and research insights in a qualitative study. Conclusions are the answer to the aim and objectives (questions) of the thesis stated at the beginning of the thesis. Conclusions must be specific and concise, numbered. The number of conclusions does not have to coincide with the number of objectives (the number of findings may be greater than the number of objectives) but the conclusions must reflect all the formulated objectives. Conclusions should include what has been analysed, the method used, the determined findings (summarized but not listed results). The statistical significance level of the calculated results must be indicated, e.g. $p < 0.05$.

16. Practical recommendations. Final master thesis may include specific tools for solving a problem or several problems.

17. List of master's publications. This section contains a list of the scientific articles written during the master's programme (published) or presented during preparation (with the editor's conclusion) and the list of the conference reports presented according to the requirements for the list of literature (see Annex No. 12).

18. References. References are provided in a new page. The list must contain at least 30 literature sources. Only cited literature is presented in master work. Literature is cited using Vancouver style (see Annex No. 12). The references should be numbered by appearance in a text.

19. Annexes.

The approval of the Bioethics Center or other necessary annexes are provided in accordance with the prevailing procedures for the ethical evaluation of student-conducted research. As an annex to the master's thesis, a declaration of support for the thesis, the author's contribution, and potential conflict of interest is included (see Annex No.15). This declaration includes information about the sponsors of the thesis, suppliers of materials, and funds (if any), or it states that "the work was conducted with the resources of the Faculty of Pharmacy/Institute/Laboratory". It is confirmed that the entire work was carried out independently, or it is specified which part of the work was not done by the author himself. When the work is conducted by a research group, consent from other researchers to use the collected data in the final work (in a free form), certified by their signatures, is required. In the absence of a

conflict of interest, it must be noted that "the author had no conflict of interest". Annexes include supporting documents if the work or part of it prepared during the study was publicly presented at a conference or published in scientific publications, if scientific research and experimental development activities (MTEP) were carried out in the preparation of the work, collaborating with a business partner, or conducting a scientific project. For these activities, the student receives additional points when evaluating the master's thesis.

20. The annexes may contain additional, auxiliary information prepared by the author (e.g. questionnaires, maps, etc.). Each annex starts with a new page and is numbered sequentially. The text and annexes should be linked.

21. The final master's thesis must be bundled and presented as required. Master's thesis is bound in such a way that it is impossible to take out separate pages. Recommended length of master thesis is 40-60 pages (without annexes).

22. Final Master's thesis must be written in grammatically correct Lithuanian or English language, without spelling, punctuation, and formatting mistakes.

23. General formatting requirements:

The thesis should be written using computer and printed only on one of white A4 format (210×297 mm) paper side, line spacing is 6 mm (1.5 space). Margins: 2.5 cm on the left and 1 cm on the right, 2cm at the top and bottom of the page. Sheet position is vertical (Portrait). The text on a page should be aligned to both the right and the left margins. The section titles are written in capital letters, **Bold**, size 16 pt. The subsection titles are written in Sentence case, **Bold**, size 14 pt. First line of the text should be at the distance of 18 pt from the title and shifted to the right by 1.5 cm. At the end of a section or a subsection a space of two empty lines should be made. Section titles are aligned to both margins, while subsection titles – to the left margin (see Annex No. 13). The thesis should be written using the programme *Microsoft Word* or other text editing programme, e.g. *LaTeX*. Text should be written using standard font such as *Times New Roman*, *Arial*, *Palemonas*, *Computer Modern Roman*. Text font size is 12 pt. The final Thesis text is provided as one document.

Page numbering. Pages must be marked with Arabic numerals at the top of the page, centred, without any dots of hyphens. Page numbering begins from the title page (number 1 is not written on it), then all the pages are numbered in order.

Table. Tables are numbered in a row using Arabic numerals (e.g. Table 1). The title of a table is written above the table using lower case, starting with a capital letter, **Bold** and *Italic*, and centred. If the title does not fit in a single line, single spacing should be used (no 1.5 line spacing between the lines of the title). If table is taken from other sources, the authors of the cited table must be specified in brackets under the title of the table (Annex No. 14). All tables must be referred to by number in the text.

Figures. All illustrations (diagrams, schemes, drawings, photographs, etc.) are referred to as figures. They are numbered consecutively using Arabic numerals (see Annex No. 14) and should be of good quality and definition. The title (first letter is capitalized) is written under the figure in the centre, a full stop at the end of the title is not required. The title should be written in **Bold** and *Italic*. Before the name of a figure, an abbreviation Fig., and its serial number (without abbreviation „No.“) is used. If the title does not fit in a single line, then 1.5 line spacing should not be used. The reference of a figure in the text should include its number.

Citations and links. Cited sources (references) are indicated in the text using square brackets. The link is a number (e.g. [1]) corresponding to the number of cited references provided in the list. Full bibliographic description of the quoted reference is provided in the list of references. The references should be numbered by appearance in a text of the master's thesis.

Footnotes. Footnotes are allocated to notes and are provided at the bottom of page. They are numbered consecutively in each page.

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**EXAMPLE OF THE TITLE PAGE
OF THE FINAL MASTER 'S THESIS**

LITHUANIAN UNIVERSITY OF HEALTH SCIENCES
FACULTY OF PHARMACY

NAME, SURNAME

TITLE OF THE FINAL THESIS

Final Master 's thesis

Integrated study programme „Pharmacy“, state code 6011GX003

Study direction „Pharmacy“

Supervisor

Scientific degree, name, surname

Consultant

Scientific degree, name, surname
[if needed]

KAUNAS, year

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**EXAMPLE OF THE SECOND TITLE PAGE
OF THE FINAL MASTER 'S THESIS**

LITHUANIAN UNIVERSITY OF HEALTH SCIENCES
FACULTY OF PHARMACY
CLINICS/DEPARTMENT/LABORATORY (where the work has been done)

APPROVED BY:

Dean of the Faculty of Pharmacy Name, Surname, signature
Date (year, month, day)

TITLE OF THE FINAL THESIS

Final Master 's thesis

Consultant [if needed]
Name, surname, signature
Date (year, month, day)

Supervisor
Name, surname, signature.
Date (year, month, day)

Reviewer
Name, surname, signature
Date (year, month, day)

The thesis was performed by.
Master 's student.
Name, surname, signature
Date (year, month, day)

KAUNAS, year

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EXAMPLE OF SUMMARY IN ENGLISH

SUMMARY

Final Master 's thesis by J. Smith/ supervisor Assoc. Prof. J. Petrauskas; Department of Analytical and toxicological chemistry at the Faculty of Pharmacy, Lithuanian University of Health Sciences. - Kaunas.

Text of summary

EXAMPLE OF SUMMARY IN LITHUANIAN

SANTRAUKA

J. Vasiliauskaites magistro baigiamasis darbas/ mokslinis vadovas doc. dr. J. Jonaitis; Lietuvos sveikatos mokslų universiteto Farmacijos fakulteto Analizinės ir toksikologinės chemijos katedra. - Kaunas.

Santraukos turinys

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EXAMPLES OF BIBLIOGRAPHIC DESCRIPTION OF SCIENTIFIC LITERATURE

Book:

1. Banker G, Rhodes C editors. Modern Pharmaceutics. New York: Marcel Dekker; 1996.

Part from the book:

1. Banker G, Rhodes C editors. Modern Pharmaceutics. New York: Marcel Dekker; 1996. p. 239-98.

Book chapter:

1. Phillips SJ, Whisnant JP. Hypertension and stroke. In: Laragh JH, Brenner BM, editors. Hypertension: pathophysiology, diagnosis and management. 2nd ed. New York: Raven Press; 1995. p. 465-78.

Article from the journal:

1. Okyar A, Nuriyev M, Yildiz A, Pala-Kara Z, Ozturk N, Kaptan E. The effect of terpenes on percutaneous absorption of tiaprofenic acid gel. Arch Pharm Res 2010; 33:1781-8.

Conference paper:

1. Soraka A, Svediene L, Sapezinskiene L. Dance movement impact on independence and balance of people with spinal cord injuries during rehabilitation. In: 10th congress of European Federation for Research in Rehabilitation - EFRR; 2009 September 9-12; Riga (Latvia). Bologna: Medimond; 2009. p. 37-40.

Electronic sources:

Database

1. EMEA. Guideline on specifications: test procedures and acceptance criteria for herbal substances, herbal preparations, and herbal medicinal products/traditional herbal medicinal products. Available from: <http://www.ema.europa.eu>.

Book

1. Kirk-Othmer Encyclopedia of Chemical Technology [online]. New York.
2. John Wiley, 1984 [cited 1990-01-10]. Available from DIALOG Information Services.

Compact disc

1. Kauno medicinos universiteto bibliotekos istoriniai rinkiniai [kompaktinis diskas]. Kaunas: KMU, 1998.

EXAMPLES OF TEXT FORMATTING

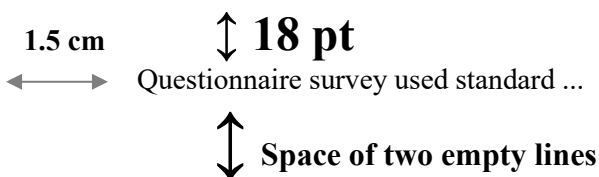
The chapter titles are written in capital letters, **Bold**, size 16 pt, e.g.,

1. LITERATURE REVIEW }16 pt

Sections are numbered by keeping the sequence in the section and numbering format, e.g.,

2. RESEARCH METHODS }16 pt**2.1. Questionnaire }14 pt**

The subsection titles are written in Sentence case, **Bold**, size 14 pt. First line of the text should be at the distance of 18 pt from the title and shifted to the right by 1.5 cm. At the end of a section or a subsection a space of two empty lines should be made, e.g.,

**2.1.1. Evaluation of questionnaire }14 pt**

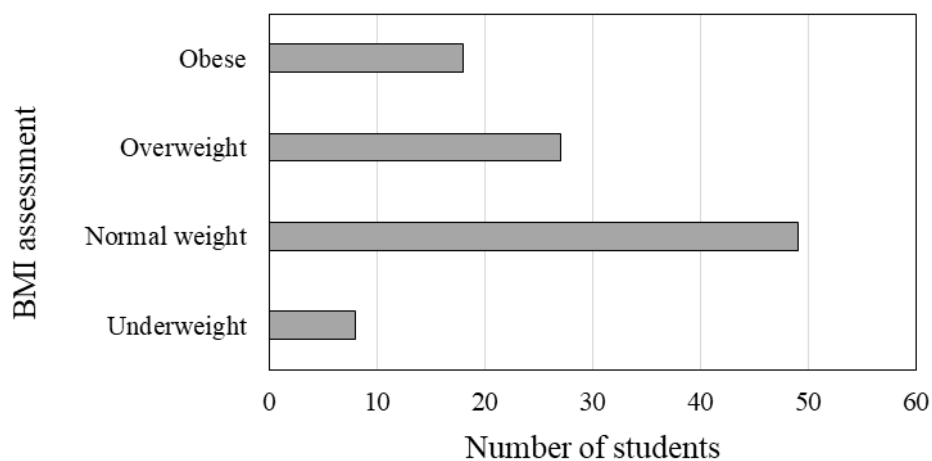
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EXAMPLE OF TABLE

**Table 1. Patient distribution according to gender, their average age
[place for citation, if needed]**

Gender	Number (%)	Age \pm SD (years)
Men	95 (60.1)	37.6 \pm 15.3
Women	63 (39.9)	40.4 \pm 18.3
Total	158 (100.0)	38.7 \pm 16.6

EXAMPLE OF FIGURE



**Fig. 1. Distribution of students according to the body mass index
[place for citation, if needed]**

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**THE DECLARATION OF SUPPORT, AUTHOR CONTRIBUTION AND
POTENTIAL CONFLICT OF INTEREST**

Master student's name and surname

Title of Final Master Thesis in English

Title of Final Master Thesis in Lithuanian

This work has been supported by

(indicate the sponsors of funds, otherwise state that the work has been done by the funds of Faculty of Pharmacy / Institute / Laboratory).

Hereby I confirm that this Master thesis has been done and written independently, without prejudice to copyright belonging to others.

**If this research has been done by the group of researchers, please indicate which part of this work has been done by the author. In this case, please provide the consent of other authors to publicly present collectively obtained results in this work and other publications.*

Master student's name, surname, signature

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EXAMPLE TABLE OF CONTENTS

SUMMARY	Error! Bookmark not defined.
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