# LITHUANIAN UNIVERSITY OF HEALTH SCIENCES FACULTY OF PHARMACY

Integrated studies of **PHARMACY** 

**PROGRAMME** 

# REGULATION FOR MASTER THESIS PREPARATION AND EVALUATION

#### I. GENERAL PROVISIONS

- 1. This Regulation sets out the guidelines and procedures for the preparation and the assessment of the Master's Thesis of the Faculty of Pharmacy of Lithuanian University of Health Sciences.
- 2. This Regulation is based on the following legislation:
  - 2.1. Order of the Minister of Education and Science of the Republic of Lithuania of 16/12/2016 No. V-1168 "The general provisions for the study programmes".
  - 2.2. Law on Research and Higher Education of the Republic of Lithuania of 30/04/2009 No. XI-242.
  - 2.3. Order of the Ministry of Education and Science of the Republic of Lithuania of 12/11/2003 No. ISAK-1603 "Regarding the provisions on the evaluation of study results".
  - 2.4. Regulation of studies of the Lithuanian University of Health Sciences (valid version).
  - 2.5. Decree of the Senate of Lithuanian University of Health Sciences of 11/01/2011 No. 5-02 "Provisions of the preparation, submission to be uploaded and uploading of electronic documents of master theses, doctor theses or summaries of monographies their submission to be uploaded and uploading to the Lithuanian Science and Studies electronic document databases and usage policy".
  - 2.6. Order of the Minister of Education and Science of the Republic of Lithuania of 03/06/2010. No. V-826 "Description of General Requirements for Master's Study Programmes".
  - 2.7. Decree of the Rector of LSMU of 02/05/2011 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".
  - 2.8. Decree of the Senate of Lithuanian University of Health Sciences of 27/05/2011 No.9-08 "Provisions on the evaluation of study results in the Lithuanian University of Health Sciences".
  - 2.9. Regulation on the preparation and evaluation of final Master thesis in the Faculty of Pharmacy of Lithuanian University of Health Sciences. Kaunas, 2016-05-05.
  - 2.10. Regulation on the preparation of final Master thesis in the Faculty of Odontology of Lithuanian University of Health Sciences. Kaunas, 2016.

# II. MAIN CONCEPTS, FUNCTIONS, DUTIES AND RESPONSIBILITIES

- 3. **Final Master Thesis (FMT)** the individual scientific research 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 certain participating department of the Faculty of Pharmacy of Lithuanian University of Health Sciences.
  - 4.2. To prepare an individual work plan 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 N. 2).
  - 4.3. To collaborate with the FMT supervisor discussing the work progress and problems.
  - 4.4. According to the schedule, to present the initial draft of the FMT to the supervisor and correct it according to the supervisor's recommendations.
  - 4.5. According to the schedule, to present the finalized FMT to the Qualification Commission

(OC).

- 4.6. If needed, to participate in the discussion of the work in the QC meeting.
- 4.7. 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.
- 4.8. According to the schedule, to present the finalized FMT to the department, to present it in the meeting of the department and submit FMT to QC.
- 4.9. To comply with the requirements layed down in the Decree of the Senate of Lithuanian University of Health Sciences of 11/01/2011 No. 5-02 "Provisions of the preparation, submission to be uploaded and uploading of electronic documents of master theses, doctor theses or summaries of monographies their submission to be uploaded and uploading to the Lithuanian Science and Studies electronic document databases and usage policy".
- 5. **Supervisor for the Final Master Thesis** a person who has a PhD degree. Candidacy for supervisors for the Final Master Thesis has to be approved by the department. Duties and functions of a supervisor for the Final Master Thesis:
- 5.1. To assist the Master student in formulating a topic, aim, objectives of the FMT and in creating an individual plan for the FMT development according to the number of credits in the programme of pharmacy which has to be presented to the QC (see Annex 1).
- 5.2. To recommend literature necessary for the completion of the FMT.
- 5.3. To discuss the FMT methodology with the student.
- 5.4. To advise the Master student and, if necessary, to recommend advisors from the related scientific fields.
- 5.5. To consistently monitor the development of the FMT, to help solve arising problems.
- 5.6. To provide recommendations for the development of the FMT.
- 5.7. To assist the Master student to discuss and interpret experimental data.
- 5.8. To discuss the presentation of the prepared FMT.
- 5.9. If needed, to participate in the QC meeting.
- 5.10. 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.
- 5.11. To evaluate the 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).
- 6. **Consultant for the Final Master Thesis** a person who has a Master degree and giving advices on the preparation of FMT. Candidacy for consultants has to be suggested by FMT supervisor together with student for the consideration at the meeting of the department. Later consultants are approved by OC.
- 7. **Qualification Commission (QC).** For the preparation and presentation of the FMT, the QC is formed from not less than five persons working in the programmes of the Faculty of Pharmacy of Lithuanian University of Health Sciences. The programme responsible presents the QC members for the approval by the Council of the Faculty of Pharmacy. The QC is approved for the period of three years. The QC members can be changed if needed. The QC members are approved during the first meeting of the Council of the Faculty of Pharmacy in September. The QC duties:
  - 7.1. To discuss and approve selected Master Thesis topics, supervisors and consultants.
  - 7.2. To approve individual plans and schedules for the FMT development (see Annex 1).
  - 7.3. To announce publicly the QC meeting time, not later than 5 working days before the planned meeting.
  - 7.4. To appoint the reviewers.
  - 7.5. To evaluate the suitability of the FMT for the review and public presentation.
  - 7.6. To solve other controversial questions related to FMT preparation.
  - 7.7. To execute other duties foreseen in Decree of the Senate of Lithuanian University of Health Sciences of 21/01/2011 No. 5-02.
- 8. **Reviewer** a scientist who evaluates the FMT according to the criteria. The list of the reviewers is

layed down by the Dean's office.

Reviewer's duties:

- 8.1. To evaluate if the work complies the criteria for the FMT.
- 8.2. A week before the Thesis 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 not later than 3 days before the defending the Thesis and prepare to reply to the reviewer's questions, remarks and explain the week points of the FMT if they are pointed out.
- 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, does not comply with the FMT requirements and could not be defended according to the reviewers, 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 others authors.
- 9. **Evaluation 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 representatives of other social partners. At least one member of the Commission (especially recommended the chairman of the comission) has to be from the other research and studies institution than that where Master student has studied.

**Evaluation Commission duties:** 

- 9.1. To organize public FMT defense and 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 scores for scientific publications according to the procedure approved by the Council of the Faculty of Pharmacy (see Annex No. 6).
- 9.5. To calculates the overall score for the defending of FMT.
- 9.6. To provide roposals 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 take part in the final thesis defense.

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

No.	Master Thesis preparation stages	Deadline, months	Activity details				
	Year III						
1	Discussion and	VI semester, April	Topics are discussed at the departments. The goal of				
	announcement of		the discussion – to avoid later remarks about the topic				
	topics		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.				

			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 minutes of the unit meeting.  The list of topics is publisly announced not later than 5 working days before the selection date.
2	Selection of the topics for the Final Master Thesis	VI semester, May	Master student choose the topics of the final thesis from the list of publisly 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.
		Ye	ar IV
3	Information of the Master students about workflow of Master Thesis preparation	VII semester, September	QC organizes methodical tutorial where Master students are informed about preparation of the FMT.
4	Approval of the Supervisors and Master Thesis topics at the Department	VII semester, until the 1st of October	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 1-2 page plan for consideration at the department (see Annex No. 1). The Master student submits the approved and signed plan for FMT together with the protocol of the department meeting to the Dean's Office which forwards the plan to the QC.
5	Approval of the FMT plan by QC	VII semester, until the 15 <sup>th</sup> of October	The QC discuss, present proposals for the improvement and approves the individual work plan for the FMT. Recommended improvements should be made within 15 calendar days.  In the case of changing the direction of the research topic and / or the supervisor and / or consultant, it is needed to re-approve those changes at the department and the QC meeting.
6	Study of the scientific literature	VII semester	The student carries out a theoretical investigation of the topic: they collect literature related to the topic and begin literature analysis. At the end of the semester, the student gives the supervisor a list of literature and a short preliminary analytical literature review, expressing their attitude towards the questions being investigated.
7	Scientific literature analysis, research organization and progress	VIII semester	The student further analyses literature and interprets the discovered scientific claims; they compose 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 is planned and organized.
0	Ct		The data callestics are supplied to date.
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, the supervisor is provided with a report about the results

			along with a result summary.	
9	FMT finalisation/	X semester	The FMT is compilated. The finalized work is	
	presentation		presented to the supervisor, discussed at the	
			department where the work has been prepared. The	
			protocol of the department meeting together with the	
			prepared FMT are presented to the Dean's Office. The	
			student submits an electronic version of the FMT in	
			the eLABa repository. The reviewer appointed by QC	
			evaluates the FMT, the student gets acquainted with	
			the review. The student prepares for FMT defense.	
			The work is defended in public session with the	
			participation of the FMT Evaluation 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 has to 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 title page (see Annex No. 10).
- 12. The student has the right to apply to the QC in writing form regarding the change of the supervisor, topic or department in which the FMT is being conducted. The student must clearly and reasonably substantiate his / her application. In the case of changing research topic substantially, it is necessary to submit a new FMT plan and the consent of the supervisor and (if any) the consultant. The changing supervisor or consultant requires the consent of the new supervisor or consultant. The application must be processed by the QC within 30 working days and a decision should be made.
- 13. 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 approval of the work in the department. 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.
- 14. The public defending of the Master Thesis is organized at the department (time and place is announced in the Message Board of the Faculty of Pharmacy and in the Intranet). The FMTs are approved in the meeting of the department staff. Not later than 2 weeks before the public defense of the Master's Thesis in the Evaluation Comission, 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. Student submits one paper version and one electronic version of FMT in PDF format to the QC. Only the work complying with all requirements for the FMT preparation is accepted. Master students, who accomplished all study programme can defend the FMT.
- 15. Within 3 working days after the meeting of the department, the Master student submits the FMT in the temporary eLABa ETD repository. The supervisor reviews the submitted work in the repository and confirms that the work could be transferred for defense. The final work placed in the temporary eLABa ETD repository and the printed work must be the same.
- 16. The QC nominates the reviewer. Reviewers submit FMT assessments to the QC no later than 1 week before FMT defense date (see Annex No. 4). The QC presents the paper and electronic version

- of FMT and reviews to the FMT Evaluation Commission. The permission for the defending of the FMT is presented by the Dean for the approval by the Rector Decree.
- 17. The date for the FMT defense and the composition of Evaluation Commission is appointed by the Rector on the recommendation of the FF Dean.
- 18. The date for the public defending of the FMTs is announced not later than one month before it.
- 19. During the meeting of the Evaluation Commission, the secretary presents the paper version of the FMT to the members of the Evaluation Commission.
- 20. During the meeting of the Evaluation Commission Master students present the finalized report on the FMT where the university and department, where the master thesis has been performed, author, supervisor and consultant (if any), topic, purpose, tasks, methodical part, results and conclusions, and possibly practical recommendations are presented. The duration of the presentation should be up to 10 min. After the presentation, Master students respond to the remarks and questions of the reviewer (if there were two, both of them) and other meeting participants.
- 21. In the FMT defending meeting, the members of the Evaluation Commission evaluate every work according to the criteria set out in the Council of the Faculty of Pharmacy and compile the form for the evaluation of the FMT by commission members (see Annex No. 5). A defense meeting is considered lawful if at least half of the members of the Commission are present.
- 22. If the supervisor or the reviewer of the FMT is the member or the chairman of the Evaluation Commission he must withdraw from the evaluation and defending procedures of the work.
- 23. The final evaluation of the FMT is composed of the evaluation of the supervisor (10%), reviewer (30%) and evaluation of the Evaluation Commission (60%) and additional points for the presentation of the work in scientific conferences and publications (see Annex No. 6). If the work has been evaluated by two reviewers, their average is calculated.
- 24. The topic of the FMT and the final evaluation mark are written in the protocol of the Evaluation Commission, electronic study record. For students who joined the LUHS Pharmacy Program until 2016 year also in in the final examination part of the student's study record.
- 25. If during the preparation and defending of the FMT dishonest behavior is noticed, the supervisor, reviewer or the member of the Evaluation Commission writes a notification to the Dean. The Dean nominates comission of 3 persons for the final decision. The work is considered plagiated if its part or all work is written by other author (whole parts or pages are written without citating real author), author rights are violated. If the commission confirms the dishonest behavior of the student, he is not allowed to defend the FMT or the defending is cancelled. Upon request of the Master student, not earlier than after one year and after the payment of the appropriate fee the Rector can allow to defend the FMT.
- 26. Not defended FMT (with evaluation less than 5) is considered to be an unfulfilled academic requirement and student's enrollment in the University is cancelled.
- 27. 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.
- 28. 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 No. 47-05 of 20 June 2014; valid form).

## INDIVIDUAL DEVELOPMENT PLAN FOR THE FINAL MASTER'S THESIS

	, Course: of the Pharmacy Integrated Mas Master's thesis preparation: from 201	
Supervisor	(scientific degree, name, surname)	
Consultant [i	f needed](scientific degree, name, surname)	
Title of thesi	is:	
Thesis is pre	epared at: (name of the department)	
Aim:		
Objectives:		
Object:		
Methods:		
Expected res	sults:	
Semester (according the study program)	Scheduled tasks	Presentation of the thesis at the conferences, scientific publications
VII		T
VIII		
IX		
X		
-	nd Thesis topic have been discussed at	

Student: Name, Surname, Signature, Date
Supervisor: Name, Surname, Signature, Date
Head of the Department: Name, Surname, Signature, Date
2.5000 of the 2 spartment (times, 2.50000000, 2.5000000000000000000000000000000000000
Qualification Commission Head: Signature, Date

<b>LUHS Pharmacy</b>	Integrated Master's	Studies	Programme

Course Group Stu	ıdent
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### Master Thesis Preparation Report

Semester .....

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

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

# EVALUATION OF THE FINAL MASTER'S THESIS EVALUATION FROM A SUPERVISOR

No.	Final work evaluation questions	Highest possible point	Evaluation
1	Ability to prepare a work plan independently (goal, 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	
Supervis	sor:		
Supervis	sor:(name, surname, signature, date)		

### **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? *			
		<b>Compliance with MBD requirements</b>			
Structure	2.	Are all the structural parts in the final thesis?	0		-2
	3.	Is the final work volume of 40-60 pages (without appendixes)?	0		-2
	4.	Are the titles of chapters and chapters separated logically and correctly in the final thesis?	0	-0.2	-0.5
	5.	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)	6.	Are the summaries (in Lithuanian and English) informative and relevant to the content and requirements of the work?	0.5	0.2	0
Introduction, goal, objectives (0.5 point)	7.	Is the relevance of the topic, research problem, goal and objectives, object, methodology described in the introduction to the work?	0.5	0.2	0
Literature review (1.6 points)	8.	Is the author's acquaintance with other scientists' works in Lithuania and the world sufficient?	0.4	0.2	0
	9.	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
	10.	Is the review of scientific, practical literature sufficiently related to the problem at work?	0.6	0.3	0
Materials and	11.	Is the methodology of work research	1.0	0.5	0

methods		properly explained, or is it appropriate to			
		achieve the objective?			
(2 points)	12.	Ü	0.6	0.3	0
	12.	Are the test instruments (samples, study groups, selection criteria) or study materials,	0.0	0.3	U
		reagents, etc. properly described?			
	13.	Are the statistical programs used for data	0.4	0.2	0
	13.	analysis, formulas, criteria used to assess the	0.4	0.2	
		level of statistical reliability properly			
		described?			
	14.	Are the questionnaires and lists of interview	0	-0.2	-0.4
		participants provided appropriately (if			
		necessary)?			
Results	15.	Are the main results of the study, obtained	0.6	0.3	0
(2 points)		by analyzing the data, provided			
		approprately?			
	16.	Are the tables and figures presented	0.4	0.2	0
		according to the requirements?			
	17.	Is the information duplicated in tables and	0	0.2	0.4
		figures?			
	18.	Has the statistical analysis of the data been	0.6	0.3	0
		properly performed and the results provided?			
		If it is qualitative research:			
		Is the analysis of the results properly			
		presented when substantiating claims with			
		quotations from respondents or observational			
D: : 6.1	10	findings?	0.6	0.2	
Discussion of the	19.	Are the results (their importance,	0.6	0.3	0
results		weaknesses) and the reliability of obtained			
<b>(1.6 points)</b>		data properly evaluated?			
	20.	Is the discussion of the results properly	0.8	0.4	0
	20.	performed?	0.0	0.4	
	21.	Is the practical value of research results	0.2	0.1	0
	21.	presented?	0.2	0.1	
Conclusions	22.	Do the conclusions reflect the theme, goal,	0.2	0.1	0
(0.6 points)		objectives (questions) of the final thesis?	0.2	0.1	
(*** <b>F</b> ***)	23.	Are the conclusions based on the analysed	0.2	0.1	0
		material and are consistent with the results			
		of the research?			
	24.	Are the conclusions clear and laconic?	0.2	0.1	0
References	25.	Is the bibliographic list of literature prepared	0.4	0.2	0
<b>(1.2 points)</b>		according to the requirements?			
	26.	Are references to the bibliographic list	0.2	0.1	0
		provided in the text correct?			
	27.	Are the sources of information correctly	0.2	0.1	0
		cited?			
	28.	Does the bibliographic list contain non	0	0.1	0.2
		scientific sources?	0.5		
	29.	Do the cited sources less than 10 years old	0.2	0.1	0
		consist 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			
. A	lditio	sources less than 10 years old?	nt of	oints	
Ad	เนเนยก	al questions that may increase the total amou	пі от р	omts	

Annexes	30.	Do the provided annexes contribute to the	+0.2	+0.1	0
		understanding of analysed subject of thesis?			
Practical	31.	Are the provided practical recommendations	+0.4	+0.2	0
recommendations		or suggestions regarding possible application			
/suggestions		of the results in future research realistic and			
		practical?			
General re	quiren	nents, the non-compliance of which reduces the	he amou	ınt of poin	nts
General	32.	Has the volume of work been artificially	-2	-1	0
requirements		increased?			
	33.	Is the work written in the correct language,	0	-0.5	-1
		in a scientific, logical and laconic manner?			
	34.	Are there any grammar, stylistic, computer	-1	-0.5	0
		literacy errors?			
	35.	Is the text consistent?	0	-0.2	-0.4
	36.	Is the content (titles of chapters, subsections,	0	-0.2	-0.4
		and page numbering) consistent with the			
		work structure and is correct?			
	37.	Has the student provided his/her opinion on	0	-0.3	-0.6
		each discussed issue?			
	38.	Has each chapter been ended with a	0	-0.2	-0.4
		summary summarizing the most important			
		conclusions of that chapter?			
	39.	Is the quality of printing, binding and visual	0	-0.2	-0.4
		material of this work acceptable?			
		Total**:			

<sup>\*</sup>Remark: If answer is possitive, reviewer should not avaluate the work and write a Notification to the Dean.

\*\*Remark: The total amount of points can not exceed 10 points; points are rounded according to mathematical rounding rules.

Reviewer's	comments	and	questions:

**Evaluation of the Final Master's Thesis:** 

2.
 3.

	(Reviewer's evaluati	on mark (in a 10 point system))
(position, scientific degree)	(signature)	(name, surname)

### **EVALUATION OF THE FINAL MASTER'S THESIS**

#### EVALUATION FROM A MEMBER OF THE DEFENSE COMMITTEE

Pharmacy study programmegroup	
Master student	
Title of Master's thesis:	

No.	Questions for final master's thesis evaluation	(mark	Evaluation  the most sure option)	
		Yes	Partly	No
1.	Did the student's presentation last no more than 10 minutes?	1	-	0
2.	Has the student clearly presented the main research problem, aim and objectives?	1	0.5	0
3.	Has the student provided information on the research methodology, indicated main research tools?	1	0.5	0
4.	Has the he student presented reseach results understandably? Was the visual material informative and understandable?	1	0.5	0
5.	Was the logical presentation sequence maintained?	1	0.5	0
6.	Has the student presented conclusions? Were they based on the presented research results?	1	0.5	0
7.	Were there any recomemendations for practical implication or suggestions regarding results application for future scientific research?	1	0.5	0
8.	Have reviewer's and commission's questions been answered correctly and thoroughly?	2	1	0
9.	Work presentation culture (was the work presented in the correct language and understandable fo the audience?)	1	0.5	0
	TOTAL			

Comments and arguments of the member of the final thesis commission		
(Position, scientific degree)	(Signature)	(Name.

surname)

#### 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	<b>0.3</b> (prize × 2)
2.	Research work has been presented at students conference and published in abstract book	<b>0.2</b> (prize × 2)
3.	Research work has been presented at other pharmaceutical, medical, chemical, biochemical, biolgical, biophysics or other conferences at National level or scientific exibitions	<b>0.1</b> (prize × 2)
	Oral presentations at the conferences	
1.	Research work has been presented at the International scientific conference	<b>0.5</b> (prize + 0,2)
2.	Research work has been presented at students conference and published in abstract book	<b>0.3</b> (prize + 0,2)
3.	Research work has been presented at other pharmaceutical, medical, chemical, biochemical, biolgical, biophysics or other conferences at National level	<b>0.2</b> (prize + 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 Clarivate Analytics Web of Science (CA WoS) database.  Citation index ≤ 1.0	1.0
6.	Articles in other peer-review sientific journals	0.5

- 1. The title "International conference" is assigned if it is stated in the conference description that it is an International conference
- 2. The amount of points given for the research presentation at the conferences is divided by the number of students among the authors
- 3. The amount of points given for the scientific articles is divided by the total number of authors

Adopted in the Council of
the Faculty of Pharmacy on 2019
Protocol No

### **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; content; abbreviations (if necessary); summary (in Lithuanian and in in one of the EU languages); abbreviations and concepts; introduction; the aims and the objectives of the work; 1. Literature review; 2. Research methodology and methods; 3. Results; 4. Discussion of the results; 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: it is noted 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* 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 pf summary is given in Annex No. 11.
- 5. **Acknowledgment** (optional part of the work). Sometimes, after the summary, the thanksgiving test 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 which is not numbered; this section is included in the table of contents. Familiar and frequently used terms and terms proposed by the author and their explanations should be included in the list. The first time a word is used, it is written in full, followed by the abbreviation in brackets. Abbreviations are written without dots.
- 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 analyzed, 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.
- 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.** Analyzed and summarized research data should be presented. This section of the final thesis may include subsections. The results must be provided using tables and 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 analyzed 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 size of this section is from 1 up to 3 pages.
- 14. Taking into account 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 of 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 work 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 prepared during the Master's course (published) or present in the course of preparation (with the conclusion of the editor) and the list of the reports presented in the conferences 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).
- 19. **Annexes** The Declaration of Support, Author Contribution and Potential Conflict of Interest (see Appendix No. 15) should be provided. It contains information on the sponsors of the final thesis, material suppliers, and foundations (if any) or states that "the work has been done by the funds of Faculty of Pharmacy / Institute / Laboratory". It should confirm that all the work has been done independently, or the part of the work has not been performed by the author. When the work is done by a group of researchers, the consent (free form) regarding the data used in the final thesis should be filled by the other researchers and confirmed by their signatures. In the absence of a conflict of interest, it should be noted that "the author has no conflict of interest".

- 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:
- 23.1. **Requirements for the text (format, font).** 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, 2 cm 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. The subsection titles are written in Sentence case, **Bold**, size 14. 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, eg. *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.
- 23.2. **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.
- 23.3. **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. 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.
- 23.4. **Figures.** All illustrations (diagrams, schemes, drawings, photographs, etc.) are reffered to as figures. They are numbered consecutively using Arabic numerals (see Annex No. 14) and shoul 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 (tithout 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.
- 23.5. **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 reference provided in the list. Full bibliographic description of the quted reference is provided in the list of references.
- 23.6. Footnotes are allocated to notes and are provided at the bottom of page. They are numeberd consecutively in each page.

# 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

# 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] Supervisor

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

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

Reviewer The thesis was performed by

Name, surname, signature Master's student

Name, surname, signature

Date (year, month, day)

Date (year, month, day)

KAUNAS, year

#### **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

#### **EXAMPLES OF BIBLIOGRAPHIC DESCRIPTION OF SCIENTIFIC LITERATURE**

Follow the Vancouver System when creating a bibliography list: https://guides.library.uwa.edu.au/vancouver

#### 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:**

#### <u>Database</u>

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

# 2. LITERATURE REVIEW \\ \}16 pt

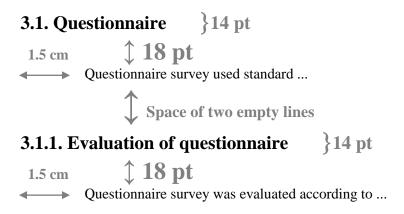
Subsections are numbered by keeping the sequence in the section and numbering format, e.g.,

# 3. RESEARCH METHODS \\ \}16 pt

## 3.1. 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 rigth by 1.5 cm. At the end of a section or a subsection a space of two empty lines should be made, e.g.,

## 3. RESEARCH METHODS \\ \}16 pt



#### **EXAMPLE OF TABLE**

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

Gender	Number (%)	Age ± 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**

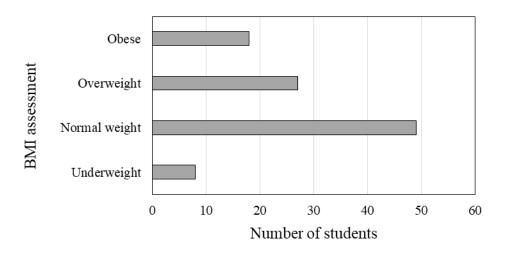


Fig. 1. Distribution of students according to the body mass index [place for citation, if needed]

# 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
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 plase provide the consent of other authors to publicly present collectively obtained results in this work and other publications.
Master student's name, surname, signature