

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

**Integrated studies of
PHARMACY**

PROGRAMME

**REGULATION FOR MASTER THESIS PREPARATION
AND EVALUATION**

Kaunas, 2022

I. GENERAL PROVISIONS

1. The Regulation establishes the main concepts, statements and procedure for the preparation and defense of master's theses in the Faculty of Pharmacy of the Lithuanian University of Health Sciences (LUHS).
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 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 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. If needed, to participate in the discussion of the work in the QC meeting.

4.6. To inform the QC and present confirmation if the FMT or its part has been presented publicly in the scientific conferences and/or published in scientific journals or proofs that the research was performed under collaboration with social partners.

4.7. 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.

4.8. All changes of department or supervisor should be approved by QC

4.9. To comply with the requirements laid 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 propose the master theses research topics the department.

5.2. To assist the Master student in formulating a topic, aim, objectives of the FMT and in creating an individual plan for the FMT according to the number of credits in the programme of pharmacy which has to be presented to the Department (see Annex 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 Advisors 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 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 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 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 Department.

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 organize methodological seminar on Master Theses plan organisation.

7.2. To evaluate the suitability of the FMT for the review and public presentation.

7.3. To approve the changes of the supervisor and department.

7.4. To appoint the reviewers.

7.5. To solve other controversial questions related to FMT preparation.

7.6. 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 finalised by QC after the consultations with Dean’s office and departments who participate in FMT process.

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). A reviewer should send an electronical version of a review via official university mail to QC and a student. 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 weak 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. **Master's Thesis 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 representatives of other social partners. At least one member of the Commission (especially recommended - the chairman of the commission) has to be from the other research and studies institution than that where Master student has studied.

Master's Thesis Defense 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 and scientific research collaboration with social partners according to the procedure approved by the Council of the Faculty of Pharmacy (see Annex No. 6).

9.5. To calculate the overall score for the defending of FMT.

9.6. To provide proposals 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. | <i>Master Thesis preparation stages</i> | <i>Deadline, months</i> | <i>Activity details</i> |
|-----------------|-----------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Year III | | | |
| 1 | Discussion and announcement of topics | VI semester, April | 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 |

| | | | |
|----------------|--------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | <p>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.</p> <p>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.</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> |
| Year IV | | | |
| 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 the 15th of October | <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 1-2 page plan for consideration at the department (see Annex No. 1). The approved and signed plans are kept at the department until the submission of FMT.</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 is planned and organized.</p> |
| Year V | | | |
| 8 | Study organization and process | IX semester | <p>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.</p> |
| 9 | FMT finalisation/ presentation | X semester | <p>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 department meeting together with the prepared FMT are presented to the Dean's Office. The student</p> |

| | | | |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------|
| | | | submits an electronic version of the FMT in the university library electronic database. The paper and PDF versions are presented to QC. |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------|

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, consultant, or department in which the FMT is being conducted. The student must clearly and reasonably substantiate his / her application. The changing supervisor or consultant requires the consent of the new supervisor or consultant. The application must be processed by the Deans office 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 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.

14. 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 electronic environment). 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 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. Student submits one paper version and one electronic version of FMT in PDF format to the QC. Only the work complying with all requirements (FMT paper version should be signed by supervisor and consultant, number of pages should be checked, bioethical approval and other necessary requirements should be checked) for the FMT preparation is accepted. Master students, who accomplished all study programme can defend the FMT. Within 3 working days after the meeting of the department, the Master student submits the FMT in the temporary eLABa ETD repository.

15. The QC appoints 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.

16. The date for the FMT defense and the composition of Evaluation Commission is appointed by the Rector on the recommendation of the FF Dean.

17. The date for the public defending of the FMTs is announced not later than one month before it.

18. During the meeting of the Evaluation Commission, the secretary presents the paper version of the FMT to the members of the Evaluation Commission.

19. 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.

20. 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.

21. 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.

22. The final evaluation of the FMT is composed of the evaluation of the supervisor (30%), reviewer (30%) and evaluation of the Evaluation Commission (40%) and additional points for the presentation of the work in scientific conferences, publications, and scientific collaboration with social partners (see Annex No. 6). If the work has been evaluated by two reviewers, their average is calculated.

23. The topic of the FMT and the final evaluation mark are written in the protocol of the Evaluation Commission, electronic study record.

24. 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 commission of 3 persons for the final decision. The work is considered plagiarized if its part or all work is written by other author (whole parts or pages are written without citing 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.

25. 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.

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).

INDIVIDUAL SCHEDULE PLAN FOR THE FINAL MASTER'S THESIS

Student:

Of Course: of the Pharmacy Integrated Master's Studies Programme

Duration of Master's thesis preparation: from 201..... to

Supervisor.....
(scientific degree, name, surname)Consultant [if needed].....
(scientific degree, name, surname)**Title of thesis:****Thesis is prepared at:** (name of the department)**Aim:****Objectives:****Object:****Methods:****Expected results:**

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

Supervisor and Thesis topic have been approved at

(Name of Department or Institution, if it is not LUHS)

(protocol No. 20.....)

dd/mm/yyyy

Student: Name, Surname, Signature, Date_____

Supervisor: Name, Surname, Signature, Date_____

Head of the Department: Name, Surname, Signature, Date_____

Qualification Commission Head: Signature, Date _____

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 development 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)

EVALUATION OF THE FINAL MASTER'S THESIS

EVALUATION FROM A SUPERVISOR

Pharmacy Studies Programme student.....

Title of master's thesis:

.....

...

.....

| 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 | | | |

Supervisor:

(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? * | | | |
| 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 40-60 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 | 0.6 | 0.3 | 0 |

| | | | | | |
|--------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|
| | | sufficiently related to the problem at work? | | | |
| 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 a 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 non scientific sources? | 0 | 0.1 | 0.2 |
| | 30. | Do the cited sources less than 10 years old 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 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 | +0.2 | +0.1 | 0 |

| | | | | | |
|---------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|
| | | understanding of analysed subject of thesis? | | | |
| Practical recommendations /suggestions | 32. | Are the provided practical recommendations or suggestions regarding possible application of the results in future research realistic and practical? | +0.4 | +0.2 | 0 |
| General requirements, the non-compliance of which reduces the amount 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.*

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

Reviewer's comments and questions:

- 1.
- 2.
- 3.
- ...

Evaluation of the Final Master's Thesis:

(Reviewer's evaluation 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 | Evaluation (mark the most suitable option) | | |
|-----|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------|----|
| | | Yes | Partly | No |
| 1. | Has a student presented clearly the research background and main problem? | 1 | 0,5 | 0 |
| 2. | Has a student presented clearly the research aim and tasks? | 0,5 | 0,25 | 0 |
| 3. | Has a student presented clearly the research methodology? | 1 | 0,5 | 0 |
| 4. | Has a student presented clearly the main research instruments? | 0,5 | 0,25 | 0 |
| 5. | Has a student presented clearly 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 students 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 fo the audience?) | 1 | 0,5 | 0 |
| | TOTAL | | | |

Comments and arguments of the member of the final thesis commission

(Position, scientific degree)
surname)

(Signature)

(Name,

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 students 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 students 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 |

1. The title „International conference“ is assigned if it is stated in the conference description that it is an International conference

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

(Signature)

Name, surname

REQUIREMENTS FOR THE FINAL MASTER'S THESIS

1. **Structure.** Title page; content; abbreviations (if necessary); 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 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 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. **Acknowledgment** (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 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. %, ml and other widely used abbreviations should not be included in a list.

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. Every chapter is recommended to be finalized by generalization of the chapter.

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). The references should be numbered by appearance in a text.

19. **Annexes** as The Bioethics Center Approval or other bioethical evaluation documents under the valid LUHS general requirements, 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”. Also all documents about participation at scientific conferences, scientific articles publication, participation in scientific research projects or collaboration with social partners should be added in part “Annexes”. Student will be given addition point for any of these activities.

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 or 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 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.

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 cited reference is provided in the list of references. The references should be numbered by appearance in a text.

23.6. Footnotes are allocated to notes and are provided at the bottom of page. They are numbered 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]
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

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

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.,

2. LITERATURE REVIEW }16 pt

Sections 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 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.,

3. RESEARCH METHODS }16 pt

3.1. Questionnaire }14 pt

1.5 cm \updownarrow 18 pt
 \longleftrightarrow Questionnaire survey used standard ...

\updownarrow Space of two empty lines

3.1.1. Evaluation of questionnaire }14 pt

1.5 cm \updownarrow 18 pt
 \longleftrightarrow Questionnaire survey was evaluated according to ...

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 |

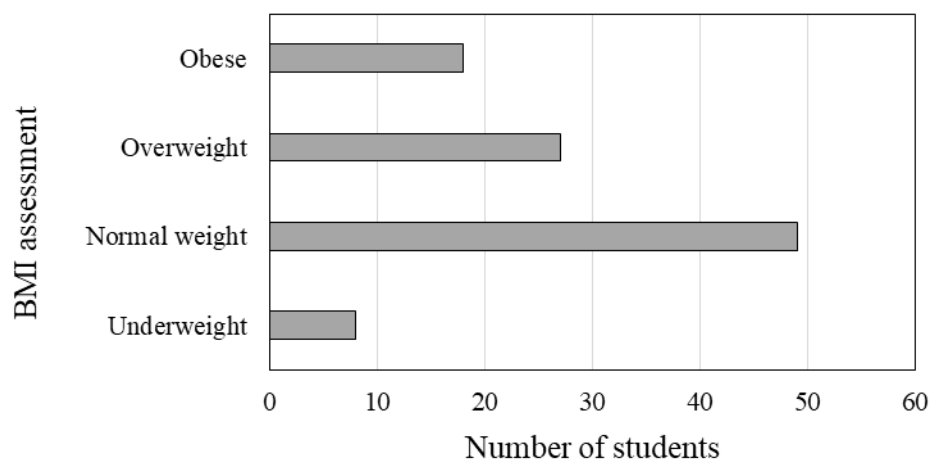
EXAMPLE OF FIGURE

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

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

EXAMPLE TABLE OF CONTENTS

| | |
|----------------------------|------------------------------------|
| SUMMARY | Klaida! Žymelė neapibrėžta. |
| SANTRAUKA | Klaida! Žymelė neapibrėžta. |
| ABBREVIATION | 6 |
| CONCEPTS | 7 |
| BACKGROUND | 8 |
| AIM AND OBJECTIVES | 9 |
| 1. LITERATURE REVIEW | 10 |
| 1.1. Section | 10 |
| 1.1.1. Subsection | 10 |
| 1.1.2. Subsection | 12 |
| 1.2. Section | 15 |
| 2. METHODS | 20 |
| 3. RESULTS | 22 |
| 4. DISCUSSION | 31 |
| 5. CONCLUSION | 33 |
| 6. RECOMENDATIONS | 34 |
| 7. REFERENCES | 35 |