APPROVED
By the Faculty of Medicine Council of 21 May 2025
of the Medical Academy of the Lithuanian University of Health Sciences;

Minutes of the Council meeting No. 127

THE REGULATIONS OF THE FINAL MASTER'S THESIS OF THE LSMU MEDICINE INTEGRATED STUDY PROGRAMME

I. GENERAL PROVISIONS

- 1. The Master's thesis (BMD) of the student is an integral part of the Integrated Medicine Study Programme of the Lithuanian University of Health Sciences (LSMU), designed to encourage students' initiative in choosing a research topic, to develop skills of planning, performance and interpretation of scientific work. This Regulation is the official document of the Faculty of Medicine of LSMU, establishing the procedure and terms for the preparation, presentation, defence and evaluation of BMD, it defines the structural, editorial and methodological requirements of the written work, the Regulation applies to all students of the Integrated Medicine Study Programme completing their Final Thesis (BMD). It does not define other forms of student research activity or their regulation.
- 2. The BMD Regulation is based on the following documents:
 - 2.1. LSMU study Regulation (Resolution No. 181-03 of the LSMU Senate of 20 June 2024);
 - 2.2. Description of the procedure for uploading documents and meta-data to the information system DSpace CRIS of the Lithuanian University of Health Sciences (Order No. 2021-V-0699 of the LSMU Rector of 30 December 2021);
 - 2.3. LSMU Open access mandate (Resolution No. 13-2 of the LSMU Rectorate of 4 November 2013);
- 3. The Dean of the Faculty of Medicine of the LSMU shall, by a separate decree, establish a minimum mandatory number of BMD execution venues for three academic years (starting from 1 September 2025) in the departments carrying out the programmes of integrated studies of Medicine and Medicine in English and in the laboratories of the research institutes of the Faculty of Medicine. The heads of departments are responsible for ensuring that the number of places determined by the Dean is ensured and meets the requirements of the quality of studies and the final master thesis. The minimum required number of places shall be calculated in proportion to

- the volume (credits) of the medicine study programme carried out in the department during the 1^{st} 4^{th} years.
- 4. The Dean of the Faculty of Medicine of the LSMU, in cooperation with profile clinics, departments and institutes, coordinates the course of BMD implementation, ensuring a smooth process and conditions for completion of theses. Issues not covered by this Regulation shall be considered and decided upon by the Dean of the Faculty of Medicine of the Medical Academy of LSMU.

II. BASIC CONCEPTS, FUNCTIONS, RIGHTS AND OBLIGATIONS

- 5. The final Master's thesis is an original research project, which is independently carried out by the Master's student, during which the scientific question relevant to the medical study programme and its solutions are analysed. The primary purpose of BMD is to develop the student's ability to conduct research independently by acquiring experience and practical skills in research activities. The process of preparation of the work is oriented to the mastering of the methodology of research work, but it is not necessarily aimed at creating new scientific knowledge. The thesis is prepared in stages through years 4 to 6, while studying in the Integrated Medicine Study Programme. In the BMD, the Master's student develops the following skills: conducting systematic research and critical analysis of scientific literature, properly applying research methods and conducting data analysis, adapting existing or original research ideas, researching and describing new factors, phenomena or patterns.
- 6. Depending on the nature and methodology of the study, BMD can be of different types, for example: clinical trial, epidemiological study (cohort, case-control, cross-sectional), questionnaire survey, diagnostic accuracy study; laboratory or experimental study (molecular, genetic, pharmacological, physiological); health economics study, health system analysis, medical ethics and law research; theoretical and analytical research (systematic review of scientific literature, meta-analysis or bio-statistical and data analysis research).
- 7. **Master's student (graduate student)** a student of the Integrated Medicine Study Programme in preparation for the final Master's thesis (BMD).
 - 7.1. The Master's student prepares BMD in accordance with the BMD Regulation approved by the Board of the Faculty of Medicine of the LSMU, and the procedures approved by the Department where the final thesis is being completed (clinical or non-clinical Department of LSMU).
 - 7.2. At the specified time, the graduate student selects one of the proposed BMD topics.
 - 7.3. The graduate student has the right to propose their BMD topic in the selected department, and to execute it with the consent of the head of the department. Topics proposed by students

must be discussed and approved by the department prior to the date on which the minimum compulsory topic proposal is submitted in accordance with the Dean's regulation. Students whose proposed topics are approved do not participate in the overall selection of topics. The graduate student has the right to apply in writing to the Dean of the LSMU Faculty of Medicine regarding the change of the department and/or BMD topic within 10 working days from the choice of the topic (the subsequent change of the topic is not allowed);

- 7.4. Together with the Supervisor of the BMD, the Master's student shall draw up an individual BMD development plan and shall comply consistently with the deadlines laid down in this Regulation;
- 7.5. The Master's student prepares all the necessary documents and receives the approval of the Bioethics Committee to conduct the scientific research;
- 7.6. The graduate student can continue the scientific research started in previous years of studies (for example, in the LSMU Student Scientific Society). The collected data can be used in the BMD if new challenges are addressed. When describing the methods and results of BMD, the graduate student must clearly indicate which part of the study was carried out before, which aspects overlap, and how they are incorporated into the new work;
- 7.7. The graduate student must declare the goals and scope of the use of artificial intelligence in the BMD or indicate that artificial intelligence tools have not been used;
- 7.8. The graduate student constantly cooperates with the supervisor of BMD, informs them about the progress of work, takes into account the comments and recommendations of the supervisor of BMD;
- 7.9. If there is a need, the graduate student has the right to apply in writing to the head of the department for the replacement of the BMD supervisor. The department shall examine the application and make a decision within 5 working days. A copy of the application and decision shall be submitted to the Dean of the Faculty of Medicine of LSMU. The new supervisor decides whether the graduate student can continue the work started or whether the BMD topic needs to be changed. If the subject is changed, the graduate student informs the Dean of the Faculty of Medicine of LSMU in writing within 5 working days;
- 7.10. If necessary, the graduate student can contact the BMD consultant, if such is appointed;
- 7.11. The graduate student can participate in mentoring sessions organised by the University, where they are consulted on various topics related to the BMD preparation;
- 7.12. The graduate student must comply with the structural and methodological requirements for the written work ("Methodological Requirements for the Preparation of the BMD of the Medicine

Study Programme");

- 7.13. The Master's student must provide the BMD supervisor with an initial written work version on time;
- 7.14. After receiving the approval of the BMD supervisor, the Master's thesis is uploaded for review into the information system DSpace CRIS;
- 7.15. Discuss the reviewer's comments with the BMD supervisor and make the necessary corrections if necessary.
- 8. The supervisor of the final Master's thesis is a person working in the LSMU department, who holds a doctoral degree and supervises the Master's student in the preparation of the BMD. The BMD supervisor is responsible for the scientific quality of the work, ensuring that the research meets scientific and academic standards. In exceptional cases where the department lacks researchers with a PhD in science, an employee with a Master's degree may be appointed as the BMD supervisor. In this case, an additional consultant with a scientific degree (PhD or Habilitated Doctorate) must be appointed, which will help ensure the quality of BMD. The BMD supervisor's candidatures are approved in LSMU departments according to the procedures and regulations of the departments.
 - 8.1. The BMD supervisor advises the Master's student on issues related to BMD preparation, provides scientific and methodological assistance at all stages of the work preparation;
 - 8.2. If necessary, the BMD supervisor recommends an additional consultant with an appropriate scientific degree, which can help ensure the quality of work;
 - 8.3. The BMD supervisor systematically monitors the progress of the work preparation, performs periodic reviews of the thesis, helps solve emerging problems and provides feedback to the Master's student;
 - 8.4. The BMD preparation phase completed by the student of the 4th and 5th years is assessed by the BMD supervisor by marking the respective module according to the approved study plan in the LSMU SIS sheet, taking into account the quality of the work completed, compliance with the established deadlines and the evaluation strategy provided for in the module description;
 - 8.5. The BMD supervisor assesses whether the final thesis is properly prepared according to all structural and methodological requirements, performs the verification of the coincidences of the work text using the appropriate measures approved by the LSMU and differentiates it from the possible plagiarism. The overlap of the work text may not exceed the specified percentage (for example, 30 percent). The BMD supervisor also verifies that the title and keywords of the topic have been properly translated;
 - 8.6. The BMD supervisor confirms that the work is ready for review and presentation for defence;

- 8.7. If possible, the BMD supervisor participates in the BMD presentation at a public defence hearing, providing additional support and support to the Master's student.
- 9. The consultant of the final Master's thesis a person working in the LSMU department or other scientific institution, having a degree not lower than a Master's degree, a professional practitioner who has mastered the basics of scientific research methodology and consulting the Master's student in the preparation of the BMD. According to the need, the BMD supervisor chooses the candidate for a consultant, taking into account their expertise and experience, and the candidacy is approved by the LSMU department where the BMD is being prepared.
- 10. **The reviewer of the final Master's thesis** a person with a doctoral degree who assesses BMD's compliance with academic and scientific requirements. In an effort to ensure scientific assessment of the thesis it is recommended that reviewers are chosen not from the specialists of the problem being examined, but from related specialties or sub-specialties to ensure objectivity and scientifically based assessment. Candidates of reviewers are selected and approved in the LSMU department where BMD is prepared.
 - 10.1. The BMD reviewer shall evaluate the BMD in accordance with the assessment form set out in the Annexes to this Regulation (Annex No. 1);
 - 10.2. The completed and signed BMD assessment form shall be returned to the department in a timely manner, ensuring that the assessment is carried out in accordance with the established deadlines and requirements.
- 11. **Public defence of Master's thesis** a public meeting of the LSMU department or departments, where BMD is presented and defended. The meetings shall be held on a schedule within the period of 1 to 2 days at the end of the 12th semester. The schedule is established by the Dean's Office, acting on the recommendation of the departments, and submitted to the Rector for approval. The date, time and place of the defence shall be included in the LSMU SIS schedule being marked as "Assessment" this must be done no later than three months before the date of the defence.
- 12. The Committee for the Public Defence of the Master's Theses a group of evaluators formed to evaluate the BMDs during the public defence hearing. The Committee must be set up in such a way that for each thesis being defended there are at least 3 members of the Committee who have no conflict of interest in the defence of the thesis (or author). The members of the Committee may be researchers or masters with research experience. The social partners may also participate in the Committee if they meet the requirements. The candidacies of the Chairperson and Members of the Committee, as well as Reviewers, are selected and approved by the relevant LSMU department where the BMD is being prepared. LSMU departments must submit to the Dean of the Faculty of Medicine a list of BMD

reviewers and members of the Public Defence Committee no later than two months before the planned public meeting of BMD defence. Based on this list, the Dean makes a final list of members of the Committee and submits it to the Rector for approval. The approved list is forwarded to the LSMU Library staff responsible for administration of the DSpace CRIS information system.

- 12.1. The BMD Defence Committee shall assess BMD presentations (each member of the committee separately) at a public defence hearing in accordance with the assessment form set out in the Annexes to this Regulation (Annex No. 2);
- 12.2. The Committee shall calculate the final assessment of the BMD defence by drawing an arithmetic average from the reviews of the reviewer and members of the Defence Committee;
- 12.3. The Committee decides on a recommendation for the Master's degree to be awarded, taking into account the outcome of the defence;
- 12.4. The Chairperson of the Committee (or the Head of the Department) shall complete and sign the minutes of the Public Defence Meeting of the BMD. The Chairperson of the Defence Committee (or Head of the Department) shall make the final assessment of the defence of BMD within 1 working day after the entry of the BMD Public Defence Committee meeting into the LSMU SIS.
- 13. The Appeals Committee is the Committee dealing with complaints arising from the assessment of the BMD. The Appeals Committee shall be formed in advance, not later than 2 working days before the BMD Public Defence Meeting, upon the recommendation of the Dean of the LSMU Faculty of Medicine and approved by the Rector of the LSMU. The Committee consists of 3 members delegated by LSMU Student Representatives and 6 Representatives of LSMU administration.

III. ORGANISATION, PREPARATION AND DEFENCE OF BMD

14. Organisation of BMD completion, terms of preparation and defence.

The process of organisation, preparation and defence of the final Master's theses (BMDs) is carried out in stages:

14.1. **Choosing the topic of the BMD.** BMD topics for the next academic year are discussed and approved at the meeting of the LSMU Department. Topics may be offered by the Department's researchers, other staff and future Master's students. For international students, topics are offered in English. The number of subjects proposed must comply with the requirements of the Dean's Order (see Paragraph 3 of this Regulation). Approved topics are presented to the Dean of the Faculty of Medicine until 30th June. The Dean establishes a list of proposed BMD topics and publishes it to the 4th year students on the LSMU Intranet within the first 10 working days of the 7th semester. The distribution of topics at the beginning of the 7th semester is organised by the Dean of the Faculty of Medicine in September. The priority of choice is given to the students in accordance with the average of the first to 6

semesters of study. If the department has approved the subject proposed by the student in advance, this information is included in the distribution of topics. Within 10 working days, the Dean informs the departments about the students who have chosen their topics. At the beginning of the 7th semester in October, the department approves BMD supervisors and consultants for students, assessing their qualifications, scientific interests, and nature of theses.

BMD preparation stages. The student completes the BMD in accordance with the requirements of the modules of the study plan. In the 4th year, they conduct theoretical research: collect, analyse literature and begin to prepare the theoretical part. At the end of the 7th semester, a list of literature and its initial analysis are presented. Later, literature analysis is deepened, research methodology is justified, and documents are prepared for the Bioethics Centre. The study may be initiated only with the approval of the Bioethics Centre. At the end of the 8th semester, a literature review and a planned data collection or an experiment are provided. In the 5th year research is conducted according to an approved plan. In the 6th year the Master's student analyses data, assesses results, prepares and presents the BMD's original version to the supervisor by the end of the 11th semester. At the beginning of the 12th semester, a revision and review of the work takes place. If shortcomings are found in the work, they are corrected according to the comments of the supervisor and by 1st March the work is submitted for the final review. The supervisor records the permission to submit the thesis for defence in the LSMU SIS. At the supervisor's permission, by 15th March, the student uploads the work into the DSpace CRIS system. The supervisor checks for matches, topic title, keyword translation and confirms submission to the reviewer. The thesis is submitted to the reviewer by 1st April. The reviewer completes the assessment form, and it must be submitted to the department by 15th April. The student and the BMD supervisor have the opportunity to get acquainted with the review. If the review contains proposals for work corrections, they must be completed, and the final version of the work is uploaded to the DSpace CRIS system no later than a week before the defence. A positive review is a condition for permission to defend the thesis. The final version of the work is available to the supervisor, reviewer and Defence Committee through the DSpace CRIS system. The BMD defence take place until 10th May.

- 14.2. **Organisation of the BMD Defence**. No later than two weeks before the defence, the departments submit to the Dean of the Faculty of Medicine lists of students who have been granted permission to defend their BMD. The Dean prepares for the Rector's approval the order for the defence of the BMD of the Medicine Study Programme.
- 14.3. **The BMD Defence Hearing and Appeal Procedure**. During the public BMD Defence Meeting, the student presents their work with a 10-minute report, which presents the topic of work, purpose, tasks, research methods, results, conclusions and practical recommendations. The report is followed by up to

10 minutes of questions and discussions. The Committee assesses the written work and its presentation, calculates the final evaluation, which is recorded in the LSMU SIS system within one working day after the defence. The defended works are published in the Lithuanian ETD database, except in cases where this is contrary to the legislation on the protection of intellectual property or other secrets. If the student does not agree with the final assessment of the BMD, they have the right to appeal in accordance with the procedure laid down in the Study Regulation.

- 15. If unfair conduct is found in the preparation or defence of the BMD, the BMD Supervisor, the reviewer or the member of the Committee must inform the Dean of the Faculty of Medicine by submitting an official report.. The Dean then forms a Committee to investigate the situation in accordance with the LSMU Study Regulation.
- 16. This Regulation shall enter into force on 1 September 2025 and shall apply to students who are currently studying in year 4.

(Student's name, surname)

EVALUATION OF THE FINAL MASTER'S THESIS

(Date)	

Peer review assessment form

The thesis consists of	`- <u> </u>	pages, the list of	of literature contains _	_sources, the
work contains	_tables,	pictures,	annexes.	

Line	Compliance with the structural and methodological requirements of the work		Assessment	
No.			No	
1.	The volume of work is not less than 20 pages (without annexes)			
2.	All the necessary structural parts are present			
3.	Distinctive chapter and section titles			
4.	The work is written in correct language, logically, laconically			
5.	There are no grammatical or computer literacy errors			
6.	The volume of work is not artificially increased			
7.	Literary sources are quoted correctly (Vancouver style)			
8.	The bibliography is correctly compiled			
9.	Cited sources no older than 10 years constitute at least 70 percent of all sources			
10.	Correctly placed tables, pictures and annexes			
11.	Declaration of use/non-use of artificial intelligence			
	Assessment of the main parts of the written work		sment 1 to 10)	
11.	Literature analysis: analysis of the latest and most relevant literature sources, the main statements and scientific problems of the topic under consideration are presented.			
12.	Purpose and objectives: explained the selected scientific problem's relevance, the proposed hypotheses are described and explained, the purpose and tasks are properly formulated.			
13.	Methodology: the research methodology is explained in detail, the research instruments are described, their suitability for the chosen problem is explained, the statistical methods used are described and their suitability is explained for addressing the identified challenges.			
14.	Results: the results presented are relevant to the topic under consideration, an analysis of the results is properly presented.			
15.	Discussion of results: the obtained results are compared with the latest results of other authors, and the student's own opinion on the topic under consideration is presented.			
16.	Conclusions: the presented conclusions are relevant and correspond to the topic of the work and the tasks set, the conclusions are based on the results obtained, suggestions and practical recommendations are provided.			
	Final assessment (average of 11-16 points of assessment):			

Comments and questions from the reviewer:
Advantages of the final thesis:
Disadvantages of the final thesis:
Evaluation of the final thesis: To submit for public defence / to submit for public defence after corrections (underline the appropriate option)
Evaluation score (grade from 5 to 10) Not to submit for public defence, evaluation score (grade from 1 to 4)
Signature of the reviewer:

EVALUATION OF THE FINAL MASTER THESIS

	(Date)
Form of assessme	ent by the Member of the Defence Committee
	Master's Thesis topic
of the Integrated Medical Study Prog	gramme group

Line No.	Final thesis evaluation statements	Assessment (From 1 to 10)
1.	Formulated the main problem of the final thesis, indicated the purpose and tasks	
2.	Explained the methodology of the work, indicated the main research instruments, data collection methods	
3.	Properly indicated statistical or other methods for solving the tasks set out	
4.	The results of the study were properly presented	
5.	Presented visual material in an understandable and informative way	
6.	The conclusions were based on the results obtained, related to the tasks and objectives set	
7.	If possible, made practical recommendations	
8.	Maintained the logical sequence of the message	
9.	The main idea of the final thesis corresponds to the substance of the medical study programme	
10.	Culture of work presentation	
	Final assessment (average of 1-10 points of assessment):	

Comments and questions from the Member of the BMD Defence Committee:

Signature of the Member of the Defence Committee: ____

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(Name of the Department)	

MINUTES OF THE PUBLIC DEFENCE MEETING OF THE FINAL MASTER'S THESIS OF THE INTEGRATED MEDICINE STUDY PROGRAMME

	(Date)	
Composition of the Defence	e Committee:	
The final master thesis is ev	aluated by at least 3 members of the Defence Committee.	
Student's name, surname:		
The evaluators:	Name, surname	Evaluation
The reviewer:		
Member of the		
Committee		
Member of the		
Committee		
Member of the		
Committee		
	Final assessment (average of evaluations by the assessors):	
		•
Name of the Class	rperson of the Defence Committee (or Head of the Depart	mant).