

Approved:
In the meeting of the Council of the Faculty of Veterinary Medicine
of the Lithuanian University of Health Sciences
No. VF10-15_21-10-2021
Amendment approved:
In the meeting of the Council of the Faculty of Veterinary Medicine
of the Lithuanian University of Health Sciences
No. VAF10-10_2023-05-16

PROCEDURE OF PREPARATION, DEFENCE AND EVALUATION OF THE OF MASTER THESIS OF THE STUDY PROGRAM OF FOOD SCIENCES

I. GENERAL PART

1. This procedure defines the preparation, defence and evaluation of Master Theses of the study programme of Food Sciences at LSMU Veterinary Academy (hereinafter referred to as an Academy).
2. The procedure is based on the following legal acts:
 - 2.1. Law on Education and Science of the Republic of Lithuania (No. XI-242 of 29th June 2016, Amendment Act No. XII-2534).
 - 2.2. Order No. V-1168 of the ministry of Education and Science of the Republic of Lithuania “General Requirements for implementation of studies” of 30 December 2016 (TAR, 2016, No. 30192).
 - 2.3. Regulation of the Studies of the Lithuanian University of Health Sciences (approved by the Decree No. 148-03 of the LSMU Senate on 22 April 2021).
 - 2.4. Regulations of Preparation of E-Documents of LSMU Master Theses, Doctoral Dissertations or Summaries of Monographs, their Presentation for Downloading and Downloading to the Storage Media of Information System of E-Documents of the Lithuanian Science and Studies and their Usage Procedure (approved by the Senate’s Decree No. 5-02 of 21 January 2011).

II. MAIN CONCEPTS, FUNCTIONS, DUTIES AND RESPONSIBILITIES

3. **Master Thesis** (thesis) – the qualifying independent and original work under the topic relevant for the study programme and selected independently by the student, and based on the carried-out scientific researches.
 - 3.1. The Master thesis reveal the ability to carry out the scientific search, generalization, use the acquired knowledge, solve the particular scientific tasks, create and adapt the most frequent ideas formed by the scientific researches, and to improve the critical thinking. The thesis is characterized by the description of new researches or regularities and generalization of well-known research methodologies on the basis of other scientists’ findings in the particular study area.
 - 3.2. The Master thesis should be of applicable nature and have elements of practical research work, i.e. it should consist of material of physical chemical, technological, microbiological experiments, and (or) on questionnaires based studies by the student. Data should be systemized, analysed and conclusions concluded in the thesis. The Master thesis should reflect the intellectual maturity, theoretical scientific knowledge, practical skills, professional competence, and readiness for independent scientific and practical work of the student.
4. **Author of the Master Thesis** (student/graduate) – the person, who studies the study programme of Food Sciences at University. The student shall prepare the thesis according to the syllabus and the present document, while she shall have a right to defend the thesis only upon completion of all the academic requirements of the study programme.
5. The student’s duties in the course of preparation and defence of the thesis:
 - 5.1. To select the thesis’ topic and supervisor of Master Thesis (hereinafter – supervisor) in appropriate unit/clinic/institute (hereinafter – department) at the set time.

- 5.2. To prepare individual work plan and schedule (**annex 1**) for the thesis, together with supervisor, and follow them.
- 5.3. To cooperate with the supervisor in order to discuss the implementation course of the work and the arising problems.
- 5.4. To comply with general research ethics requirements and obtain the approval of the University Bioethics Center for a (teaching) examination performed by a student, if persons (respondents) are involved.
- 5.5. To collect the research material and to carry out the researches provided in the work plan of the thesis.
- 5.6. To submit timely report on the thesis.
- 5.7. To submit the primary text of the thesis to the supervisor on time and to correct it with regard to the supervisor's remarks and recommendations.
- 5.8. To submit the prepared thesis to the department on the set time and to present the work in the department's meeting.
- 5.9. To perform other functions specified in the resolutions of LSMU Senate.
- 6. Supervisor of Master Thesis.** The following persons may act as a supervisor: lecturer of special subjects in the study field with the doctor's degree and (or) scientists with the doctor's degree and showing scientific activities in the field of Food Sciences. The candidacies to the supervisors are approved during the meeting of the department.
- 7. Functions of the supervisor:**
 - 7.1. To consult on the formulation of the topic, the objective and tasks of the thesis, and the formation of an individual work plan.
 - 7.2. To consult regarding relevance sources of literature.
 - 7.3. To discuss the methodology of the thesis.
 - 7.4. To consult the students and to recommend the consultants of borderlands (if needed).
 - 7.5. To observe systematically the preparation course of the thesis and to help to solve the arising problems.
 - 7.6. To submit remarks and suggestions to the student regarding preparation of the thesis.
 - 7.7. To discuss and to consult how to interpret the research results together with the student.
 - 7.8. To consult about the presentation of the thesis prepared by the student.
 - 7.9. To take part in the discussion of the theses during the meeting of the department.
 - 7.10. The thesis' supervisor cannot act as a commission member of defence of the theses, when the work of the graduate, who was under his supervision, is presented.
- 8. Replacement and renouncement of the supervisor:**
 - 8.1. If the supervisor has to be replaced due to important reasons in the same meeting, the meeting in the department is organized, during which the necessity to replace the supervisor is reasoned. If the department agrees with the supervisor's replacement, the extract from the minutes of the unit's meeting is submitted to the dean, following which the dean issues the decree permitting the supervisor's replacement. The supervisor might be replaced at least 3 months until the end of the studies, if the topic is not changes and at least 6 months until the end of the studies, if the topic changes.
 - 8.2. If the unit and supervisor have to be replaced due to important reasons, the replacement shall be coordinated with the faculty's dean, managers of departments, and the present and future supervisors at least 1 year before the end of the studies.
 - 8.3. The topic of the final theses can be changed, but not later than 6 months before the end of studies. The final version of the title of the final work must be approved at the last meeting of the department, for the consideration of the final work. An extract from the minutes shall be submitted to the Dean's Office.
- 9. Reviewer** – the person, who evaluates the Master Thesis in grades and writes a review (**Annex 4**) must be a lecturer of special subjects in the study field with the doctor's degree and (or) scientists with the doctor's degree and showing scientific activities in the field of Food Sciences
10. The Master Thesis shall be reviewed by one reviewer.

11. Reviewer's functions:

11.1. to assess the compliance of the thesis with the set requirements in ten-grade system (**annex 2**) by filling the reviewer form (**annex 3**).

12. The list of reviewers shall be submitted by the dean and approved by the orders of the Rector or Vice Rector for studies.

13. Not later than within 3 working days from the issuance of the Rector's order on permission for the student to defend the final work, but not later than 3 working days before the date of defense of the final work. By the decision of the Rector or the Vice-Rector for Studies, the date of the defense of the final thesis is set not later than 10 working days before the final thesis defense commission and the commission of appeals are formed.

14. Defence commission of theses (hereinafter – Commission) – the commission of at least 7 members from competent specialists in the field of food sciences – lecturers, scientists, professional practitioners, representatives of social partners, and a secretary approved by the Rector following the suggestion of the dean of the Faculty of Veterinary Medicine. Master Thesis may be defended if during defence participate the chairman and at least 5 members of commission.

15. Commission's chairman must be leader scientist or professor in food sciences field.

16. Commission's secretary – a person, who completes the defence minutes of theses, statements and student's credit books. The employee of servicing staff, an administrator of studies or a laboratory assistant may be appointed as a secretary.

17. Functions of the commission:

17.1. Each member of the commission shall assess the theses and their presentation according to the evaluation form (**annex 4**) approved in the Council of the Faculty of Veterinary Medicine using 10 grade scale (**annex 2**).

18. Commission of appeals – commission approved by the Rector following the suggestion of the dean of the Faculty of Veterinary Medicine. The commission of appeals shall consist of 3 representatives delegated by the Student Council and 6 representatives of the administration and/or lecturers. The commission of appeals shall act as provided in the LSMU Regulation of the Studies.

III. PREPARATION PROCEDURE OF THE THESIS

19. Preliminary topics for the Master Theses are provided by the lecturers (leading the subjects of the study field) to the dean's office by January 15 of the current year. The topics in departments can be offered by students themselves. The topics of the theses have to be from the field of food sciences and correspond to the results of the second cycle study program of Food Sciences.

20. The topics shall be discussed in the meeting of the department and checked by Study Program Committee before the submission to the dean's office. The purpose of discussion is to prevent future discussions about relevance of the topic, its usefulness and necessity of the second cycle Food Sciences study programme's results.

21. Approved topics are published in the dean's office and/or in the electronic space of LSMU by February 1 of the current year.

22. Every student has (full-time and part-time) to select preliminary topic of the thesis and agree with the supervisor, till the 15th of September.

23. If the student does not select a unit of the thesis, the dean shall allocate the student to certain unit according to the number of students conducting the theses in certain units in 5 working days after from the deadline for student selection.

24. When the students select the supervisors and departments, the dean issues a decree indicating the full name of the student and the units, where the theses are conducted.

25. The thesis of the full-time and part-time students is prepared from the beginning of the first semester according to the syllabus. The preparation of the thesis may be started earlier following the student's wish and if the process is arranged with prospective supervisor of thesis.

26. The student, together with supervisor, shall prepare individual work plan (**annex 1**) of the thesis within one calendar month (until September 30) from the beginning of thesis' preparation. It has to

contain a topic, objective and tasks of the thesis, and preliminary terms of work performance. The individual work plan shall be approved in the meeting of the department.

27. The student shall prepare the thesis independently following the requirements set herein. The student shall collect material for thesis during independent work hours and during practical training at the Academy's units, enterprises, laboratories or other institutions involved in activities in the field of food sciences.

28. In agreement with the head of the unit and the supervisor of the final work, the student may have access to the equipment necessary for the thesis preparation at the departments, laboratories or other units of the University

29. At the end of each semester supervisor estimates student's works done according to the individual work plan. The students shall receive a credit test at the end of semester that ("Pass"/"Not passed") shall be recorded in the e-register in the LSMU SIS database. The final register formed by the department (clinic/institute) shall be delivered to the dean's office.

30. The preparation course of the thesis shall be discussed: for the full-time students at the end of 2 semester, for the part-time students at the end of 2 and 4 semesters during the meeting of the department, where the work is conducted. The intermediate report of the student (**annex 5**) shall be delivered to the dean's office together with the extract from the minutes of the meeting of the department, where it should be marked whether the student has carried out the planned tasks. If the student failed to perform planned tasks, the academic failure is recorded. Academic failure can be completed within retake week.

31. The finished thesis shall be delivered to the supervisor at least 3 months before the end of studies.

31.1. The signature of the person who edited the thesis and confirming the correctness of the work in the English language, is required on the front cover of the work (**Annex 6**).

31.2. The supervisor shall check the thesis and record the decision on the completion of the work and compliance with the requirements described herein (**Annex 6**). The decision shall be confirmed by the signature of supervisor.

31.3. The supervisor checks the student's thesis using „Oxsico“, a text matching software subscribed and administered by the University, in order to assess whether there are any attempts to violate the copyrights of other authors. The overlap of the work text cannot exceed 30 percent. A text match report generated by the data verification software must be submitted to the dean's office.

32. The prepared and confirmed by the supervisor thesis shall be presented during the meeting of the department. The theses (one copy) approved in the unit and the extract from the meeting's minutes (containing the list of students, who are recommended or not recommended to defend the work), shall be delivered to the dean's office.

33. The students, who have met all the requirements of the study programme, are allowed to defend the theses. The decision to allow the student to defend the thesis shall be executed as the Rector's order.

34. The student, who has academic failures, is not allowed to defend the thesis.

35. If dishonest behaviour, work's plagiarism, duplication or falsification of research data are determined while preparing the thesis, the person, who has found such things, shall write an official report to the dean. The further procedure is specified in the LSMU Regulation of the Studies.

36. All the theses have to be checked according to the procedure set by the Senate for plagiarism.

37. When the permit to defend the thesis is given, the postgraduate student has to download the thesis to the Research Information System CRIS at least 30 calendar days before the public defence day set by the Rector or Vice Rector for studies.

38. The detailed requirements for the writting of Master Thesis are given in **annexes 7 and 8**.

IV. REVIEWING OF THE THESIS

39. At least 30 days before the defence day, the thesis shall be submitted to the reviewer through the CRIS Reasearch Information system. The reviewer shall be from the field of study in which the

reviewed thesis is written. The reviewer evaluates the thesis and delivers a review and assessment of the thesis (**annex 3**) to the dean's office before the deadline set by the dean's office.

40. The student is entitled to get familiar with the review at least 3 days before the defence of the thesis and to get prepared to answer the reviewer's questions or to explain the specified shortages.

41. If the reviewer's assessment of the thesis is negative, the second reviewer shall be ordered by the dean's decree to review the thesis. If the second reviewer evaluates the final work negatively, defence of the thesis is not allowed.

V. COURSE OF DEFENSE OF THE THESIS

42. The date of public defence of the theses shall be announced at least one month before the defence day on the board of the dean's office of the Faculty of Veterinary Medicine and/or digital area of University.

43. The Commission's chairman and members have to review the theses in the CRIS Research Information system before the date of defence of the theses.

44. The theses are defended in public meetings of the Commission.

45. The dean's office shall present the printed theses with the reviews to the chairman and members of the defence commission before the beginning of the meeting.

46. Defence procedure of the theses:

46.1. The Commission's chairman shall present the composition of the commission, its powers and explain the defence procedure.

46.2. The student shall present presentation – the prepared report on the thesis (with the *MS Power Point* programme), where the topic, its relevance, objective, tasks, research methodology, results, conclusions and recommendations or suggestions are given.

46.3. Up to 12 minutes are given for the student's report.

46.4. Afterwards the chairman of the Commission presents the reviewer's observations and questions, while the student answers those questions.

VI. EVALUATION OF THE THESES

47. The reviewer evaluates the thesis by filling the reviewer form (**annex 3**) in 10 points system (**annex 2**).

48. The Commission's members shall evaluate each thesis during the meeting according to the criteria specified in form given in **annex 4**. The Commission's member shall write his/her observations, arguments and questions on the form. When the final evaluation is given the meaning of evaluation in the words shall be provided in the brackets.

49. The final evaluation of the thesis consists of reviewers' evaluation – 30 percent (percent coefficient – 0,3) and mean of evaluations of the Commission's members – 70 percent (percent coefficient – 0,7). The results of all the calculations shall be rounded down according to the mathematical rules.

50. The final grade of the thesis is calculated according to the following formula:

$$GB = 0,3 \times R + 0,7 \times \left(\frac{K_1 + \dots + K_n}{n} \right)$$

GB – final grade of the thesis;

R – evaluation of reviewer;

K – evaluations of the Commission's members;

n – number of the Commission's members.

51. The secretary shall write the topic of the thesis, the mean to the nearest hundredth of grade of the reviewer and Commissions members and final grade into the commission's minutes. The minutes shall contain the questions asked by the Commission and the student's answers to them. The minutes shall be signed by all the members of the Commission.

52. The secretary shall record the final evaluations into the defence register and student's credit book in the column of thesis. The credit books shall be signed by all the members of the Commission.

53. The final grades of the theses shall be verified by the commission's voting before their publication to the students.
54. The not defended thesis, which receive less than 5 grades, are regarded as academic failure and the student is expelled.
55. A student who failed to present the thesis is allowed to defend the final work only after renewal of studies in accordance with the procedure of the LSMU Regulation of the Studies.
56. If the student does not agree with the evaluation of the thesis, s/he has a right to submit an appeal following the procedure described in the LSMU Regulation of the Studies.
57. The persons, who implement the study programme and defend the theses, are conferred with the qualification of Master's of Agricultural Sciences. The diploma of higher education together with the supplement are issued for them.

VII. EFFECT OF THE PROCEDURES

58. The Procedure of Preparation, Defence and Evaluation of Master Theses of the Study Programme of Food Sciences (approved 21-10-2021, minutes no 10-15) comes into effect on 1st of September 2022. The latest changes will come into force from 1st of September 2023.

VIII THE RIGHTS OF THE SUDENT

59. Regarding the assessment and assessment procedures, the student has the right to appeal in accordance with the provisions of the **LSMU Study Regulations**.
60. In cases of harassment, sexual harassment, pursuit or violence, the student may contact the University administration directly or fill in the report form in the Academic Ethics section of the University website in Lithuanian or English, as specified in **the Rules of Prevention of Harassment, Sexual Harassment, Pursuit and Violence of Lithuanian University of Health Sciences**. Free psychological assistance is provided to LSMU staff and students who have experienced discrimination, harassment or other degrading events.
61. Students have the right to complain about disputes with the administration and other employees in accordance with the **LSMU Student Dispute Resolution Procedure with the administration and other employees**.

VIII. FINAL PROVISIONS

62. The description may be amended by decision of the Council of the Faculty of Veterinary Medicine.

ANNEXES

APPROVED:

Dean of the Faculty of Veterinary
Medicine

First and lastname

Date

**LITHUANIAN UNIVERSITY OF HEALTH SCIENCES
STUDY PROGRAM OF FOOD SCIENCES
INTEGRATED STUDIES OF MASTER THESIS
.....DEPARTMENT (CLINIC / INSTITUTE)**

Student's name and surname

... year of the ... group

INDIVIDUAL WORK PLAN

Preparation duration of Master Thesis:

day month year – month year

The title of the Master Thesis:

The title

The supervisor of the Thesis

title, scientific degree, first and last name

Kaunas, year

The objective of the Thesis:

The tasks of the Thesis:

MASTER THESIS PREPARATION PLAN

The tasks	Deadline
Discussion of the topic with supervisor. Preparation of individual work plan of the Master Thesis, the consideration of the plan in the Department, its presentation to the supervisor and the Dean's office. <i>(The approved individual work plan together with the extract of the minutes from the meeting of the unit must be submitted to the Dean's office before the date indicated by the Dean's office.)</i>	September – October 20...
Theoretical studies necessary to solve the problem of Master Thesis. Detailed analysis of bibliographical sources. Analysis of theories, conceptions, models. Formulation of the theoretical requirements based on which the analytical part of the research will be performed.	October – December 20...
Collection of the resources of literature on The understanding of research methods on	January – June 20...
<u>Preparation of the Report on the first work stage according to the defined form.</u> <i>(The report and the extract from the minutes of the meeting of the unit must be delivered to the dean's office).</i>	June 20...
The preparation of the plan of the research and experiments, the performance of the plan and collection of other materials required for the research.	September – October 20...
Detailed analysis of bibliographical resources. The preparation of the bibliographical review.	November – December 20...
Qualitative and quantitative data analysis of the results. The processing, concluding and preparation of the findings.	January – February 20...
The formation of practical application of the findings. Preparation of concise conclusions, suggestions and recommendations. The discussion of the descriptive part of the results.	March 20...
Preparation of the bibliographical list required for the Master Thesis. Arrangement of the Thesis (correction of the title page, table of contents, pictures, tables, texts etc.).	March 20...
Preparation of summary in English	April 20...
Presentation of the final work to the supervisor. Supervisor's evaluation of the suitability of the Thesis for defense.	April 20...
Approval of the work in the unit (department/clinic/institute) <i>(the date may be specified during the current year).</i>	up to 1 May 20...
Final formalization of the Master Thesis and delivery to the dean's office <i>(1 copy of the Thesis with the signatures of the author, supervisor and head of the unit shall be delivered; the exact date will be indicated by the dean's office during the current year)</i>	May 20...
Uploading of the Thesis into the ETD database <i>(the exact date will be indicated during the current year)</i>	May 20...
The preparation of the article for SMD <i>(non-obligatory).</i> 20...
Prospective date of the defense <i>(the exact date will be indicated by the dean's office during the current year)</i>	June 20...

The individual work plan of the scientific research work was discussed in the meeting of the unit (department/clinic/institute) of on..... 20...., minutes No.

Supervisor

*(title, scientific degree, first
and last name)*

(signature)

Student

(first and last name)

(signature)

The evaluation (in 10 scores system) of the reviewer and the members of the Commission is assigned to one of three levels of achievement - threshold, typical, and (or) highest:

The evaluation mean	Level of achievement - threshold, typical and:	Evaluation scores	Description of the scores mean
The final work is evaluated positively and / or defended	Highest	10 (excellent)	Excellent, exceptional knowledge and skills
		9 (very good)	Very good knowledge and skills
	Typical	8 (good)	Higher then moderate knowledge and skills
		7 (moderate)	Moderate knowledge and skills, there are some mistakes
		6 (satisfactory)	Knowledge and skills are below moderate level, there are some mistakes
	Threshold	5 (weak)	Knowledge and abilities meet the minimum requirements
The final work is evaluated negatively and / or non-defended	—	4 (non-satisfactory)	Knowledge and abilities do not meet the minimum requirements
		3 (non-satisfactory)	
		2 (non-satisfactory)	
		1 (non-satisfactory)	

THE EVALUATION OF THE MASTER THESIS

EVALUATION OF THE REVIEWER

The author of the Thesis: _____

The title of the Thesis: _____

The study program: **Food Sciences**

Volume of the Report: _____ pages

No.	The evaluation criteria of the Master Thesis (if the evaluation is other than YES (10 scores), leaving a comment is a must)	Evaluation		
		* Evaluation must be given in integer numbers, i.e. without a comma.		
		Evaluation in scores		
		10	9-5	4-1
1.	The thesis has all structural parts.			
2.	The scope of the Thesis meets the recommendations (35 – 55 pages excluding Annexes). The Thesis has titled chapters, sections and subsections distinguished. The format meets the requirements set in the Procedures. The Master Thesis is written without grammatical, stylistic errors and is of correct computer literacy. The text is fluent, scientific, logical and coherent. The table of contents complies with the requirements. Vocabulary of the most important terms and abbreviations is indicated. The list of bibliographical literature is set correctly.			
3.	The summary is informative, written correctly in foreign language, with the list of keywords. The relevance of the topic is described. The objective and tasks are relevant to the topic and are formed correctly. The review of literature is detailed and relevant to the topic. The review of literature describes the problem of the research. The review of literature contains the analysis of scientific literature. The references cited in the Thesis are quoted correctly. All the resources of literature are relevant to the topic of the Thesis.			
4.	The course of performance and the methods of research are described in correct and detailed manner. The statistic' data analysis is described in methods used and relevant statistic methods are chosen. The most important findings are provided in the Thesis. The findings described are coherent and clear. The tables and pictures meet the Requirements. The research results provided in the tables and pictures of chapter of the results are not duplicated. Statistic data analysis is conducted correctly. The findings of research discussed in the chapter of work results are based upon and compared with the findings of other scientists. The			

	student provides his own opinion in the chapter of discussion of the results. The presentation of the findings described in the chapter of results of the research are not the same as the one described in chapter of discussion of the results. If the Annexes are present, they help to perceive the topic analyzed.			
5.	The conclusions are relevant to the objective and tasks set. The conclusions are written correctly (in informative and detailed manner). The relevance of applicability of the findings is presented (if the Thesis is of applicable nature). The suggestions are logical (relevant to the conclusions and summary of the Master Thesis).			
<p>* Remark: The final evaluation of the Reviewer is presented as sum of the scores (rounded to the nearest hundredth) assigned to the Reviewer's evaluation criteria divided by the number of evaluation criteria (number of evaluation criteria is 5). According to Study Regulations of LSMU Section 6 paragraph 245: A ten-point assessment scale is used for the final assessment. The lowest positive score is 5. Mathematical rules such as $6.49 = 6$ and $6.50 = 7$ are used to calculate the assessment score (except for the lowest positive score when it is lower than 5, eg $4.75 = 4$).</p>				

The Reviewer's questions: _____

The conclusion of the Reviewer: _____

The evaluation of the Master Thesis in evaluation mark:

(title, scientific degree first
and last name)

(signature)

(date)

THE EVALUATION OF THE MASTER THESIS

EVALUATION OF THE MEMBER OF THE COMMISSION OF THE MASTER THESIS

The _____ year _____ course student _____

of the Study Program of Food Sciences

The title of the Master Thesis _____

No.	The evaluation criteria of the presentation of the Master Thesis	Evaluation		
		* Evaluation must be given in integer numbers, i.e. without a comma.		
		Evaluation in scores		
		10	9-5	4-1
1.	Presented the main problem of the Master Thesis. Substantiated the objective and tasks of the Thesis.			
2.	Presentation of the methods of the research was coherent, the main methods and the course of the research was indicated. Indicated the methods of processing statistical data.			
3.	Was coherent during the presentation of the Thesis results. The visual material is detailed and easy to comprehend. The interpretation of own findings was presented.			
4.	The conclusions are reasonable and detailed. Practical recommendations/suggestions (if there were any) were proposed on the basis of the findings.			
5.	The logical sequence of the presentation was maintained. The answers to the questions were correct and complete: reviewer's questions asked (if there were any); questions asked by members of commission (if there were any). Editorial quality of the presentation is good (the quality of illustrations, font size etc.). The presentation was visually rich. The presentation speech was fluent. The presentation was performed in good timely manner (up to 12 minutes).			
* Remark: The final evaluation of the Reviewer is presented as sum of the scores (rounded to the nearest hundredth) assigned to the Reviewer's evaluation criteria divided by the number of evaluation criteria (number of evaluation criteria is 5). According to Study Regulations of LSMU Section 6 paragraph 245: A ten-point assessment scale is used for the final assessment. The lowest positive score is 5. Mathematical rules such as $6.49 = 6$ and $6.50 = 7$ are used to calculate the assessment score (except for the lowest positive score when it is lower than 5, eg $4.75 = 4$).				

Other remarks and arguments of the member of the commission of The Master Thesis:

Questions asked by the member of commission:

The evaluation of the Master Thesis in evaluation mark:

(the evaluation mark written by the member of Assessment comission (in 10 point system))

*(title, scientific degree first
and last name)*

(signature)

(date)

LITHUANIAN UNIVERSITY OF HEALTH SCIENCES
STUDY PROGRAM OF FOOD SCIENCES
INTEGRATED STUDIES OR PART-TIME STUDIES OF MASTER THESIS
.....DEPARTMENT (CLINIC / INSTITUTE)

STUDENT'S NAME AND SURNAME

... year of the ... group

THE REPORT

Preparation duration of Master Thesis:

day month year – month year

Kaunas, year

Title of the Master

Thesis: _____

1. Analysis of literature under the analyzed topic.

(Describe what and how many (scientific) literature has been analyzed, in what databases the information has been searched for, what magazines have been analyzed the most, what topics have been examined independently, etc. The presentation of the list of articles is not needed.)

2. Research methodologies learnt by the author of Master Thesis and methods of statistical analysis planned for application *(brief description).*

3. Collected experimental and other material relevant to the analyzed topic *(brief description).*

4. Other relevant information *(attending of the courses, internships, conferences; presentations read in the conferences and seminars; published articles - brief description).*

5. I have (not) implemented all the tasks according to the individual plan.

.

The report on postgraduate studies was discussed in the meeting of the department/clinic/institute of on 20..., minutes No.

The supervisor

title, scientific degree, first and last name

(signature)

Head of the Department

title, scientific degree, first and last name

(signature)

Student

Name Surname

(signature)

**THE LITHUANIAN UNIVERSITY OF HEALTH SCIENCES
VETERINARY ACADEMY**

The Faculty of Veterinary Medicine

Name, Surname

TITLE IN LITHUANIAN

TITLE IN ENGLISH

MASTER THESIS

Of Integrated (or part-time) Studies of Veterinary Medicine

The supervisor: title, scientific degree, first and last name

Department

Kaunas, year

THE WORK WAS DONE IN THE DEPARTMENT OF
CONFIRMATION OF THE INDEPENDENCE OF THE WORK DONE

I confirm that the Master Thesis presented is „.....“.

1. Has been done by me (myself).
2. Was not used in any other Lithuanian or foreign University.
3. I have not used any resources that are not indicated in the work and I present the complete list of used literature.

(date) *(author's first and last name)* *(signature)*

**CONFIRMATION OF THE CORRECTNESS OF LITHUANIAN LANGUAGE IN
THE WORK**

I confirm the correctness of Lithuanian language in the work done.

(date) *(author's first and last name)* *(signature)*

**SUPERVISOR'S CONCLUSION REGARDING THE DEFENSE OF THE MASTER
THESIS**

(date) *(supervisor's title, scientific degree
first and last name)* *(signature)*

THE MASTER THESIS HAS BEEN APPROVED IN DEPARTMENT/INSTITUTE

(date of approval) *(title, scientific degree first and last name of
the Head of Department/institute)* *(signature)*

The Reviewer of the Master Thesis

1)

(title, scientific degree, first and last name) *(signatures)*

The evaluation of defense commission of Master Thesis:

(date) *first and last name of the secretary of the defense
commission)* *(signature)*

The example of summary in Lithuanian

SANTRAUKA

Baigiamojo darbo pavadinimas

Autoriaus vardas ir pavardė

Magistro baigiamasis darbas

Tekstas

Raktažodžiai

The example of summary in English

SUMMARY

The title of the Thesis

Author's first and last name

The Master Thesis

Text

Keywords:

DETAILED REQUIREMENTS FOR THE STRUCTURE OF THE THESIS

- The main structural elements of the thesis are the following:
 - Title page;
 - Flyleaf that confirms independence of the done work;
 - Table of contents;
 - Summary in Lithuanian and English;
 - Abbreviations (if necessary);
 - Introduction with the objective and tasks of the work;
 - Review of literature;
 - Research methods and material;
 - Research results;
 - Discussion of results;
 - Conclusions;
 - Suggestions/recommendations (optional part);
 - Acknowledgement (optional part);
 - List of literature;
 - Annexes (if necessary).
- The **title page (Annex 1)** provides the necessary information: name of higher education school, name of the faculty, full name of the student, name of the topic (in Lithuanian and English), name of the study programme – MASTER THESIS of full-time or part-time Food Sciences programm, full name of the supervisor, pedagogical title, scientific degree, city, year. The topic's title has to be informative, concrete and in compliance with the presented material.
- The **second page (Annex 2)** provides confirmation about independence of the done work and responsibility for correctness of the Lithuanian language (English for foreign students) in the done work, conclusion of the supervisor about defence of the Master Thesis, number of the approbation minutes of the Master Thesis in the department and conclusion, as well as evaluation of reviewer of the Master Thesis.
- **Table of contents** – it is a part that itemizes the structure of the thesis. The table of contents is written as the chapter's headline – in capital letters. All chapters, sections and subsections of the thesis shall be referred in the table of contents. The enumeration shall be done in Arabic numerals. The abbreviations, summary in the Lithuanian and English languages, introduction, acknowledgement(s), conclusions, recommendations, list of literature, and annexes shall not be enumerated. The table of contents shall be presented tidily. The titles of the chapters shall be written in capital letters, while the titles of sections and subsections – in small letters. The titles of the chapters, sections and subsections provided in the table of contents have to correspond to the titles given in the thesis, and their enumeration without changing the succession. The table of contents shall be refined when the thesis is completed.

- **Summary (Annex 3)** – brief description of the thesis' essence in Lithuanian and English. At first the summary shall be written in Lithuanian, then in English. If the thesis is prepared in English, the summary in English shall go first and then – in Lithuanian. The title of the thesis, author's name, surname and keywords shall be indicated in the summary. The brief information on the problem solved by the thesis' author, methods used by the author, and received results shall be provided. The texts of the summaries shall be printed on one page and shall not exceed 1700 characters without spaces. The summaries in the Lithuanian and English languages shall be the same. The summary is written when the thesis is finished.
- **Abbreviations** – the abbreviations acceptable on the international level or used as shortened scientific names should be provided. The abbreviations shall be explained when they are used in the text for the first time. The abbreviations cannot be used in the titles of the chapters, sections and subsections, except when the abbreviations are conventional.
- **Introduction** – it is an introductory part, the card of the Master Thesis. The relevance of the work is highlighted in the introduction. The reasoned explanation about works performed in the particular analyzed area and about lack of researches shall be provided with regard to scientific publications. In such a way the **objective** and the set **tasks** of the thesis presented in the end of the introduction are substantiated. The introduction has to be directly related to particular topic of the work, researches performed in the work, and objective of the work. The volume of the introduction shall be 1-2 pages.
- **Objective of research** – it is a formed goal to attain the particular work result. The objective has to correspond to the title of the topic and cover it. It is formed briefly, usually by one sentence.
- When the objective of the work is formed, the concrete **research tasks (it is recommended 2-4 tasks)** that allow to reach the objective of the research and which reflect work consistency and logics, are determined. All tasks shall be enumerated. It is not suitable to formulate such tasks as, for example: "To make a review of literature on the chosen topic" or "To summarize the obtained results and to present conclusions and recommendations", as this is not a task related to a specific task, but applies to all master's theses.
- **Review of literature** – the topic-related scientific researches carried out in Lithuania and abroad have to be described in separate sections and subsections. The review of literature has to be directly related to the topic of the thesis and the carried-out researches. It is recommended to use the latest publications of the authors (recommended not older than 10 years). It is not recommended to quote the textbooks because they are not original; only the material re-quoted by other authors. The review of literature should not be very wide with regard to the topic. It has to correspond certain topic and conducted researches. The structure of textbooks or facts of textbooks should be avoided in this part. It is not recommended to use the literature not related to the topic. The volume of this part should make 30 and lower percent of the total volume of the work.
- **Research methods and material.** The place, time and period of performed research shall be described in this part of thesis. Then this part describes consistently the object and methods of the conducted or analyzed researches. The statistical methods and software (e.g., Microsoft Excel, SPSS, Statistica, SAS, etc.) should be indicated in this part. The grouping principles of data, models of statistical data and calculated statistical indexes should be presented. It is important to clearly indicate the scope of the research (number of samples tested). Research methods are presented in accordance with the order of the formulation of tasks. Student must draw a scheme of the research. The volume of this part should be till 10 percent of the total volume of the thesis.
- **Research results** – the chapter, where the results of the researches conducted by the author are described. The results of other authors shall not be used in this part. The results shall be presented in such a sequence as defined in the tasks. This chapter may have sections and subsections. The clear and substantiated data of researches, observations etc. shall be presented and described. The data shall be presented in the text, tables or pictures without repeating them, and in the text by references to tables or pictures. When the results are described, it is recommended to stress immediately, which result was higher or lower than some other. The data provided in the chapter of research results should be processed by statistical methods. It is necessary to indicate whether the results obtained are statistically reliable, by writing the value of p after the result (e.g., $p < 0,05$). The considerations, presumptions or explanations of results should not be included in this chapter. The volume of the research result's part should make 30-50 percent of the total volume of the thesis.
- **Discussion of results.** This part is used to compare the noticed regularities with the findings of other authors, to explain the received results on the ground of findings of other authors and to express

author's opinion. The description of results of own researches should not be repeated here. The text should not be overloaded with numbers; the tables or pictures should not be presented. The volume of this part should be about 2-3 pages or 3-5 percent of the total volume of the thesis.

- **Conclusions.** There are clear and brief answers to the tasks set in the beginning of the thesis. The conclusions shall be written on the new page. They shall be enumerated and formed on the ground of the research results, concretely, briefly, and according to the sequence of tasks. The conclusions must be accurate, concise and clearly stated. It is not allowed to repeat results only. Usually one conclusion (several if necessary) shall be written for one task. The conclusions should show, whether the tasks set in the introductory part have been solved and whether the objective of the work has been achieved. The tables, pictures, quotations and other references to the bibliographical sources shall not be presented in this chapter.
- **Suggestions/Recommendations.** The practical suggestions/recommendations regarding the research methods, tools and modes to solve the problem shall be provided in this part. The recommendations shall be formed briefly, concretely and they shall be enumerated. This chapter is optional. The suggestions may not be separated into separate chapter. They may be included into the chapter of discussions.
- **The list of literature** shall be presented on the new page. The enumerated descriptions of the used literature and Internet sources (the latest, if possible) shall be presented. In order to make the list of literature, the Vancouver system should be used. The detailed information about Vancouver system is provided on the LSMU website, column of library (Information for users → Library Rules and Regulations). The bibliographical descriptions of the publications used in the work shall be presented according to their sequence of quotation in the text, starting with the first reference source. The descriptions should not be transliterated (e.g., sources written in Russian should be written in Russian letters).
- **Annexes** – optional yet necessary part in certain cases. The additional, auxiliary information or information prepared by the author independently may be included into the annexes (for example, statistical more concrete information, questionnaires of survey, more thorough tables, pictures, maps, etc.). Besides, the annexes contain the information on publications from the research material, if the graduate was (co-)author, as well as on the made scientific reports, etc. The characters of the annexes are not included into the number of thesis' characters. The annexes shall be named and enumerated (e.g., Annex 1. Questionnaire of Survey). The references to the annex should be included into the text of the thesis.

CLERICAL REQUIREMENTS FOR THE THESES

- The text of the thesis has to be written by computer on one side of standard white paper of A4 format (210 x 297 mm).
- The recommended volume of the Master Thesis is 35-50 pages without annexes.
- The thesis has to be written in Lithuanian. The foreign students write the thesis in the language specified in the contract (English).
- The work has to be bound, tidy, written in correct and fluent language, without any proof mistakes. It has to satisfy the writing and punctuation requirements of the Lithuanian (English for foreign students) language. The ideas have to be laid out clearly, consistently, intelligibly and systematically.
- The computerized illustrations (diagrams, schemes, pictures, photos) have to be of good quality and sufficiently expressive.
- Margins of the text: from the left – 30 mm, from the top and the bottom – 20 mm, from the right – 10 mm.
- The pages (except for the title page) shall be enumerated. The page's number shall be written in the lower right corner of the page, in Arabic numerals, without any dots or commas.
- The first line of each paragraph shall be dragged from the left margin by 10 mm. The bilateral justification shall be set for the paragraphs – the text shall be justified according to the right and left margins.
- The space of 1,5 lines shall be left between the lines. The titles of the sections shall be dragged from the text by 2-line spacing, and the titles of sub-sections – by 1,5 lines.
- The thesis shall be printed in the font Times New Roman. The height of the characters of the main text is 12 pt (font). The Italic may be used in the text, for example, when Latin terms are written. The percent shall be marked in words in the text – proc., while the mark % shall be used in the English text.
- The text of the thesis is divided into **chapters, sections and subsections**.
- The titles of the chapters shall be written in capital letters in 16 pt bold font. The titles of the sections shall be written in 14 pt, subsections– 12 pt bold font, in small letters, except for the first letter.
- The title of the chapter shall be written in the new page, while the sections and subsections remain in the same page. The titles of the chapters and the sections shall be laid out symmetrically within the page's width, while the titles of subsections shall be started as the first line of the paragraph.
- The number of chapters, sections and subsections depends on the topic; however, the smallest structural unit should not be smaller than 0,5 page. The main keywords present in the title of the topic have to reflect and be related to the titles of the chapters, sections and subsections. The titles of the chapters, sections and subsections have to correspond to the content and reflect the consistent and logical examination of the topic.
- The headlines' words cannot be transferred. No dot is put after the headline. The headline cannot stay on one page, while the text starts on the other. The sections receive the number of the chapter and its running number (e.g., 1.1., 1.2., etc.). The subsections receive the number of the section and its running number (e.g., 1.1.2., 1.1.3., etc.).
- The **tables** shall be enumerated successively along the entire thesis in Arabic numerals.
 - The number of the table shall be written above the table in the left corner next to the word "Table". Both the table number and the word "Table" shall be written in **12 pt Italic bold** font. The title of table shall be written above it starting with capital letter in *12 pt Italic* font (e.g.: **Table 1.** *Chemical composition of the tested product.*). The informative title shall be given to the tables. If the name does not fit in one line, then the 1.5 interval between the title strings is not used (1 interval spacing shall be selected). After the title of the table, the dot is given. If the tables are created by other authors, the number of source in the brackets has to be given.
 - Explanations/notes (if necessary) shall be written bellow the table in 10 pt font.
 - The references to the table have to be given in the text. In all the cases the tables have to be closely related to the text's material and thus they have to be commented accordingly.
 - The table has to be laid out vertically on the page or inserted in such a way that it should be rotated clockwise while reading the text.

- The dimensions of values shall be written in the table's headline under the title of the descriptive value; therefore, only the numbers shall be presented in the main part of the table.
- The numbers in the columns have to be aligned. No free space can be left in the table. If no data are available, the dash shall be written. The recurrent numbers cannot be replaced by quotation marks. The quotation marks shall be written only when the words repeat in the table's columns.
- Small tables may be inserted in the same page one under another. In case of very long tables, which cover several pages, when the tables are transferred, the top headlines shall be repeated on the next pages and such as inscription as "Continuation of the Table 2" shall be written on the top of the table, as well as the top of the table (first line) in second page should be repeated.
- The first titles of top headlines of the tables shall be started with capital letter. If the table in vertical columns is divided in smaller parts under the top headline, the headlines of all the divided (smaller) columns shall be started with small letters (in the table, words and numbers shall not be written in bold)
- **Pictures** (illustrations/figures) shall be enumerated successively along the entire thesis in Arabic numerals.
 - The number of picture shall be written below the picture in the middle next to the word "Fig.". Both the picture number and the word "Fig." shall be written in **12 pt Italic bold** font. The picture's title shall be written below the picture starting with capital letter in *12 pt Italic* font using the abbreviation "Fig." (e.g.: **Fig. 1. Chemical composition of the tested product.**). The informative title shall be given to the pictures. If the name does not fit in one line, then the 1.5 interval between the title strings is not used (1 interval spacing shall be selected). After the title of the picture, the dot is not given.
 - Explanations/notes (if necessary) shall be written under the picture in 10 pt font.
 - Illustrations – graphs, photos, schemes and drawings are also considered to be pictures – shall be of good quality and sufficient resolution.
 - The titles of the x and y axes and the units of measurement shall be indicated.
 - If the pictures are created by other authors, the number of source in the brackets has to be given.
 - The references to the picture have to be given in the text. In all the cases the illustrations have to be closely related to the text's material and thus they have to be commented accordingly. The text can not repeat the results shown in the picture.
 - The illustrations shall be laid out in the text just under the references to them or in the annexes.
 - The illustrations with their numbers and titles have to be in one page and cannot be transferred.
- **Quotation of literature sources.** When the literature sources are quoted in the text, the Vancouver system should be used. When the source is quoted for the first time in the text, its number in Arabic numerals should be indicated, e.g., (1). If the same source I quoted in the other place in the text, the original quotation number should be left. When the author is mentioned in the text, the following words should be used: P. Petraitis (5) states that... When several sources are quoted in the same place, the numbers should be separated by comma, e.g., "Protein metabolism in the rumen is the result of the metabolism of microorganisms (16, 19)". If several sources are written in sequence the shortening is used e.g., "Bacteria of rumen absorb and process non-protein nitrogen and synthesize it into proteins (5–7, 12). The dash cannot be used between the quoting sources if only to adjacent sources are quoted (1, 2). The text shall be quoted and the statements of other authors shall be rephrased without distortion of essence. The statements, which repeat the thoughts of other authors word by word, shall be presented as quotations (within the quotation marks). It is unethical and considers as plagiarism to publish the text of some work in the theses using original ideas or thoughts of other author without reference to that author.