Master thesis guidelines

FOR JOINT MASTER PROGRAMME IN MARINE BIOTECHNOLOGY

Approved by EU-CONEXUS Academic Council JANUARY 2021







JMPMB Master thesis guidelines

Index

Preamble		3
Article 1.	General provisions	3
Article 2.	Master thesis preparation and defence timeline	3
Article 3.	Master thesis supervisor and co-supervisor	4
Article 4.	Master thesis topic catalogue	4
Article 5.	Choosing Master thesis topic	5
Article 6.	Master thesis plan	5
Article 7.1 Article 7.2 Article 7.3	: Thesis structure	5 6 7
Article 8.1:	Jury of the Master thesis	8
Article 8.2:	Thesis assessment (manuscript and defence)	8
Article 8.3: Article 8.4 Article 8.5 Article 8.6	: Intellectual property rights	9 10
Annex 1. N	Master thesis plan	11
Annex 2. I	Master Thesis Title page	12



Preamble

The joint Master programme in Marine Biotechnology (JMPMB) is implemented by six universities: Universidad Católica de Valencia San Vicente Mártir (Spain), La Rochelle Université (France), Agricultural University of Athens (Greece), Universitatea Tehnica de Constructii Bucuresti (Romania), Klaipėdos Universitetas (Lithuania), Sveučilište u Zadru (Croatia) (hereinafter referred to as 'Partner') and all together hereinafter referred to as 'Partners' or 'Consortium of Universities'.

The Partners agree to apply the following joint guidelines for the Master thesis work in the JMPMB.

Article 1. General provisions

Master thesis is an integrated part of the joint Master programme in Marine Biotechnology with the workload of 30 ECTS. Master thesis is carried out by the student in one of Partners', Associated Partner universities or other higher education and/or research institution ('host university') according to the chosen Master thesis topic.

Before starting the Master thesis work, the student must have completed all previous courses and gained at least 90 ECTS.

During the thesis work, students are focusing on a specific subject for a certain amount of time. The students work under the supervision of a thesis supervisor and, if relevant, a co-supervisor. During thesis work, students can apply the techniques and knowledge they gained during the courses in the three previous semesters. The final product of Master thesis is a written document ('Master thesis', 'thesis') stating the main scientific results. The Master thesis results are presented and defended publically ('Master thesis defence').

During Master thesis work, all students are insured by the host university against the consequences of physical accidents and liabilities towards the third parties via the appropriate insurance.

The Programme Coordinating University will be in charge of the coordination of the Master thesis course.

Article 2. Master thesis preparation and defence timeline

	The second year of the JMPMB (3 rd – 4 th semesters)
Master thesis topic catalogue is published	November
Choosing the Master thesis topic from catalogue (in communication with thesis supervisor).	November - December
The student may suggest his/her topic, especially if the work is foreseen to be carried out at another institution, which does not belong to the Consortium of Universities or Associated Partners	
Confirmation of Master thesis topic and university for the 4 th semester mobility (host university)	20 December
Master thesis plan	15 – 28 February
Training/Trials/Lab work/Sampling/Analysis of the samples	February - March
Thesis writing and midterm revisions by supervisor	April - May
Thesis submission	20 May



Approval of Master thesis for public defence by the supervisor	31 May
Master thesis defence	1 – 15 June
Announcement of the final grade	June
Complementary Master thesis defence If a student did not submit the Master thesis on time or fails Master thesis defence	September (next academic year)
Complementary Master thesis defence In case of unforeseen conditions (medical problems, etc.), another date will be offered to the students. The supervisor and the Jury of Master thesis will decide on the exact time.	until 20 December

The exact dates shall be announced together with the publishing of the Master thesis topic catalogue.

Article 3. Master thesis supervisor and co-supervisor

The Master thesis is an individual work of the student under the supervision of the professor ('supervisor').

The Master thesis supervisor shall meet the following requirements:

- to be a teaching and/or research staff of the hosting university;
- to meet the requirements to supervise Master thesis under the host university institutional regulation but to hold at least doctoral degree in the field of Master thesis;
- to have at least CEFR B2 proficiency in English.

The Master thesis supervisor has the following responsibilities:

- to supervise the student in the development of the thesis;
- to provide the student with necessary equipment and software to carry out Master thesis research;
- to evaluate the performance of the student during the Master thesis work;
- to propose the members for the Jury of Master thesis;
- to confirm if the Master thesis can be defended publically (approval).

The Master thesis supervisor may suggest, or the student may apply to have the Master thesis co-supervisor. The co-supervisor must be approved by the supervisor.

The Master thesis co-supervisor can be:

- a teaching and/or research staff from host or any other higher education institution, or
- an expert from industry (industrial mentor) who holds at least a Master's degree or equivalent professional experience in the field of Master thesis;

And, the main responsibilities of the co-supervisor are:

- to assist the student in the development thesis;
- to evaluate the performance of the student during the Master thesis work.

If for any reason there is any disagreement between the Master thesis supervisor and the student, the student has right to ask for a new supervisor by means of an appropriately justified written request addressed to the Academic Coordinator of the JMPMB.

Article 4. Master thesis topic catalogue

Research topics for Master thesis are offered by the teaching and research staff of the Consortium of Universities, Associated Partners, other higher education institutions.



The Master thesis topics, collected by the Academic Coordinator, shall be approved by the Programme Board in the beginning of November each year.

The Master thesis catalogue is published for the 2^{nd} year students on the EU-CONEXUS Smart Campus.

The student may suggest his/her topic and supervisor, especially if the work is foreseen to be carried out at another higher education and/or research institution, which does not belong to the Consortium of Universities or Associated Partners.

The Master thesis topic proposal must include the following information:

- 1. Title of Master thesis
- 2. Short description of the thesis research topic (100 words)
- 3. Supervisor
- 4. Email id of the supervisor
- 5. Host university

Article 5. Choosing Master thesis topic

The student can contact the supervisor to discuss the future work before applying/confirming the chosen topic.

The student will be able to choose the Master thesis topic by filling in the application form on the Programme's website until beginning of December. If there is a competition for the same project, the priority will be given to the student with a higher ranking (the ranking depends on the grade point average (GPA) of the previous semesters (50%), motivation letter (50%)).

The final confirmation of Master thesis topics and the host university is announced on the EU-CONEXUS Smart Campus by 20 December.

Article 6. Master thesis plan

After the student and the supervisor confirms the Master thesis topic, the Master thesis plan is made and signed in two copies. The supervisor is responsible to keep his/her original copy and to add to the Master thesis review.

The Master thesis plan (see Annex 1) has to include the Master thesis research topic, timeline, the scientific problem, the goals of the Master thesis, type of thesis and the draft content.

The scanned copy of the Master thesis plan has to be sent to the Academic Coordinator of the JMPMB.

Article 7. Master thesis guidelines

Article 7.1: Thesis types

The Master thesis must be original and contribute to scientific knowledge. It could be presented in three different formats as follows:

- a) Experimental (including analytical and numerical modelling): the expected level and quality of the thesis should be equal to a scientific publication in a peer-reviewed journal. This means that this type of thesis is not evaluated based on the number of pages, but based on the quality and conciseness of the work.
- b) <u>Project</u>: this consists of two elements: (1) the project, a professional activity designed and executed primarily by the student as a way of solving a problem, and (2) an accompanying essay about the project.



c) <u>Bibliographic:</u> the main objective of this type of research is to conduct desk research, i.e. to collect existing information on a topic or problem. The student can obtain this information from a variety of sources such as journals, scientific articles, books, archival material and other academic works. This desk research provides an insight into the current state of the chosen topic or problem. To conduct a literature review as a quality Master thesis, it is not enough to summarise the information found. It is necessary to establish a relationship between the sources, make comparisons between them to be able to critically analyse the information gathered on the topic, and thus answer the initially proposed research question.

Article 7.2: Thesis structure

Depending on the selected thesis types, the adequate format should be followed. The contents of each thesis structure are presented below:

a) Experimental thesis

- Executive summary (max 400 words).
- Abstract (max 200 words).
- Introduction and aims.
- Materials and methods contain the design of the research: e.g. experimental design, area description, sampling methods, analysis methods, statistical design and methods, the model, etc.
- Results: gives an overview of the most important data, both in written text, figures and tables. All the raw data have to be added in the annex and be uploaded in the submission application.
- Discussion: offers a critical analysis of the interpretation of the data, compared to the available literature.
- Conclusions.
- Acknowledgements.
- References, Mendeley Desktop or other apps accepted, can be used http://open.mendeley.com/use-citation-style, following the standards of the APA Publication Manual, Harvard Citation System, Vancouver Standards or Chicago Style Manual.
- Annexes.

b) Project thesis

- Executive summary (max 400 words).
- Abstract (max 200 words).
- Introduction & aims.
- Work plan.
- Project development.
- Conclusion.
- Acknowledgements
- References, Mendeley Desktop or other apps accepted can be used <u>http://open.mendeley.com/use-citation-style</u>, following the standards of the APA Publication Manual, Harvard Citation System, Vancouver Standards or Chicago Style Manual.
- Annexes.

c) Bibliographic thesis

- Executive summary (max 400 words).
- Abstract (max 200 words) (including 5-6 keywords).
- Introduction and aims.
- Material and methods.



- Results.
- Discussion.
- Conclusion.
- Acknowledgements.
- References, Mendeley Desktop or other apps accepted can be used <u>http://open.mendeley.com/use-citation-style</u>, following the standards of the APA Publication Manual, Harvard Citation System, Vancouver Standards or Chicago Style Manual.
- Annexes.

For the common sections of the Master thesis, the students should consider the following considerations:

- The Executive summary (400 words) contains a summary of all relevant information documented in the thesis (introduction, material and methods, results, conclusion).
- The Abstract (200 words) conforms the summary but without detailed information about methods results.
- The Introduction should contain the state of the art of the subject, with references to relevant recent literature; when the thesis is part of a broader research project, the content of the project can be mentioned as well.
- The data have to be presented in a logical order; each table, figure, etc. must be attended by a legend which contains all necessary information to understand the table or figure
- In the Conclusions, a summary of the main findings is given.
- The Acknowledgements refer to the funding agencies, field workers.
- The Reference list is limited to the literature cited in the text

Article 7.3: Thesis format

The format requirements are as follow:

Volume. At least 16 pages are recommended excluding the title page, table of contents, abstracts, bibliography and annexes. There is no limit on the maximum number of pages.

Font. The thesis is written in Times New Roman 12 Pt, interline 1.5.

Page format. An A4 page with a left-hand margin of 3 cm, a right-hand margin of 2.5 cm, and top and bottom margins of 3 cm each are required unless special permission is obtained. Illustrations and appendices should also conform to this requirement. Illustrations, Photography, maps, diagrams, and drawings may be included on graph paper in such a way as not to be obscured when the project is bound. Preferably, small illustrations are placed in the text.

Tables and figures should be numbered and labelled following the style manual being used. Tables or figures larger than the page size (21.0 x 29.7 cm) should be folded leaving binding space on the left margin of at least 5 cm, and any folded edge should fall 1.25 cm within the corresponding edge of the project. Reduction techniques should be used only with special permission.

Page numbers. The pages of the text should be numbered with Arabic numerals. Begin page 1 following any preliminary pages.

References. Bibliographical references, tables, figures according to the standards of the APA Publication Manual, Harvard Citation System, Vancouver Standards or Chicago Style Manual.

Language. The Master thesis has to be written in English. The Abstract has to be written in English and in the language of the host university.

The title page should include the following information (the template is as an Annex 2):



- The logos of EU-CONEXUS and members of the Consortium of Universities and of the host university, if the Master thesis were carried in another institution;
- Logo of the department*
- Title of the Master thesis;
- Name and surname of the student;
- Name and surname of the supervisor(s);
- Name of the department* and the host university;
- Month and year of publication.
- Photo, which illustrates the Master thesis topic*

The second page must include:

- Authorisation to include the Master thesis in the EU-CONEXUS virtual library
- Declaration of honest work

Submission format: the Master thesis has to be submitted in pdf format to the EU-CONEXUS Smart Campus.

Article 8. Master thesis assessment

A student has right to defend his/her Master thesis if only when all other courses in the programme and individual study plan have been passed.

If the supervisor indicates in the Approval of Master thesis for public defence by the supervisor that he/she does not recommend to defend the Master thesis, the student has right to present his/her work to the Jury. The final decision will be carried out by the Jury members.

The thesis should be defended in June. If the student fails her/his thesis defence, he/she has right to defend again in the next defence term (September). In case of unforeseen conditions (medical problems, etc.), another date will be offered to the students. The supervisor and the Jury of Master thesis will decide on the exact time.

If the student did not prepare the Master thesis on time (May), he/she may be recommended to postpone the Master thesis submission for the Complementary defence session in September or in the next academic year.

Article 8.1: Jury of the Master thesis

The Master thesis will be assessed by the Jury of the Master thesis ('Jury'), composed of three members, of which at least one members must belong to the Consortium of Universities. The three members must belong to different institutions.

The members of the Jury of the Master thesis may be proposed by the Master thesis supervisor. The final Jury of the Master thesis is composed and confirmed by the Programme Board by May. The Programme Board appoints the chair of the Jury from the approved members. The members of the Jury should hold a doctoral degree in the field of Master thesis or similar. The Jury of Master thesis shall be published in the EU-CONEXUS Smart Campus for the student's information.

The members of the Jury could be present physically or participate virtually in the public defence.

Article 8.2: Thesis assessment (manuscript and defence)

The student submits the Master thesis manuscript to EU-CONEXUS Smart Campus within the timeline indicated in the Article 2.

^{*} Not mandatory



The supervisor evaluates the Master thesis and communicates the grade with a written approval for Master thesis defence and review (up to 400 words) to the Academic Coordinator. The cosupervisor, if relevant, may submit his evaluation (in written format) to the supervisor. The supervisor decides if to consider the opinion of the co-supervisor in his/her final assessment and review. In case of results confidentiality, this note has to be included in the review, and the Jury informed about it in advance, followed by the confidentiality disclosure concern.

The supervisor sends out the Master thesis manuscript to the members of the Jury at least five working days before the public defence.

The Jury members review and evaluate the thesis based on the criteria indicated in the Article 8.4. and have individually filled in assessment table for the public defence.

The final grade for the Master thesis consists of

- 1) Assessment of the Master thesis manuscript for 70 % (20% supervisor, 50% Jury)
- 2) Public defence (oral presentation) 30%.

The average grade of the Jury for each component is evaluated as the average of all members' individual grades.

The assessment of the Master thesis manuscript and public defence by the supervisor and each Jury member shall be collected, protocoled and submitted to the Academic Coordinator and the Programme Coordinating University and kept for at least 2 years after the student graduates.

The Master thesis is kept in the EU-CONEXUS Smart Campus library for unlimited time.

The grade shall correspond to the grading system of the Programme Coordinating University. The final grade will be converted to the ECTS system as agreed in the Students' assessment regulations.

Article 8.3: The defence

The public defence of the Master thesis shall take place physically or virtually at the Programme Coordinating University.

The structure of the presentation depends on the criterion of the student, but it shall include a brief description of the problem, an analysis of what has been done related to topic, results and discussion, and the conclusions.

The duration of the presentation is a maximum of 15 minutes. The Jury members can ask the questions in 20 minutes.

The defence is public to the audience. The Jury of Master thesis, supervisor must attend the public defence physically and virtually.

If the Master thesis results are listed as confidential, the supervisor must include this in his/her review and the defence is organised to respect the confidentiality.

After the presentation and questions and answers, the Jury withdraws and evaluates the defence based on the criteria indicated in the Article 8.4.

If the Jury concludes that the student does not satisfy the minimum requirements for Master's qualification. The student acquires the right to defend his / her diploma thesis again in the next examination term as indicated in the Article 8.2.

Article 8.4: Evaluation criteria

Following aspects are evaluated (including their respective weight in the score):

Master thesis manuscript:



1. Title, Abstract, Summary: 10 %

2. Introduction, Background and context: 15 %

3. Methods: 15 % 4. Results: 20 %

5. Discussion: Interpretation within the research context: 30 %

6. Layout: 10 %

Public defence:

1. Presentation and its structure: 30 %

2. Contextual awareness and critical thinking: 30 %

3. Format of the presentation: 10 %4. Ability to answer the questions: 30 %

Article 8.5: Intellectual property rights

The Student owns author's property and moral rights for the Master thesis.

The Student provides the Consortium of Universities, for the duration of the validity of property rights, with a non-exclusive right to submit and publicly disclose study works created by the Student while fulfilling their obligations, as determined by the legislation defining the study process in the Consortium of Universities, in the intranet databases of the EU-CONEXUS Smart Campus.

Property rights to computer programmes, databases, study works and other works created by the Student are transferred permanently to the Consortium of Universities if the works were created by using the experience gained at the University, intellectual property, financial support, equipment or premises of the University.

Article 8.6: Plagiarism

Plagiarism is considered a form of fraud and an irregularity within the study programme. To commit plagiarism is to present (parts of) a source as original and your own, without adding any acknowledgements and or references. It can relate to different forms of production, such as texts (written, oral), images (photographs, film, graphs, diagrams, figures, etc.), databases, ideas, etc.

By submitting the Master thesis and signing them, the student confirms that the presented work is a unique result of his/her individual work, with appropriate references to other intellectual property.

When fraud is detected in the Master thesis, the Jury will discuss and decide about the consequences for the student.

Annexes:

Annex 1. Master thesis plan

Annex 2. Example of the Master thesis title page



Master thesis plan

Student: name(s) and surname(s)	Supervisor: dr. name(s) and surname(s)				
	Co-supervisor (if applicable): dr. name(s) and				
	surname(s)				
Master thesis topic:					
The scientific problem:					
The aims of the Master thesis:					
1.					
2.					
The type of the thesis:					
The type of the thesis.					
Draft content:					
Timeline:					
•					

Date: Date:

Signature of the student Signature of the supervisor

















Name(s) Surname(s) of the student

Master Thesis Title

Name of Host University Department

Illustrating photo

Supervisor:

Co-supervisor:

Date