



Ph.D. IN AGRICULTURAL, FOOD AND ENVIRONMENTAL SCIENCES

XXXVIII (24°) EDITION

ACCADEMIC YEAR 2022/23

ORGANIZATION, ASSESSMENT AND DIDACTIC PLAN

1. Plan of activities:

	Year 1	Year 2	Year 3
NOVEMBER	Meeting with all the new Ph.D. students and the Faculty Board, aimed at communicating the rules and deadlines that must be followed during the 3 years of doctorate.		
APRIL – EARLY JUNE (1st and 2nd year), SEPTEMBER (3rd year) PPT presentation	<u>First seminar.</u> A bibliographic seminar introducing the topics of the doctoral thesis. Duration: max 20 MIN	<u>Second seminar.</u> A bibliographic seminar presenting the methodologies used for the doctoral thesis. Duration: max 20 MIN	
OCTOBER (1st and 2nd year), NOVEMBER (3rd year). Written Report and ppt presentation	<u>First annual Report.</u> Didactic activities attended and research activities carried out during the 1 st year, and short program of the activities planned for the 2 nd year. Duration max: 10 MIN.	<u>Second annual Report.</u> Didactic activities attended and research activities carried out during the 2 nd year and short program of activities planned for the 3 rd year. Duration max: 10 MIN.	<u>Third (final) Report.</u> Didactic activities attended and research activities carried out during the 3 years of the doctorate. Duration: max 30 MIN
NOVEMBER, 30th	-----		Submission of the Doctoral thesis to external evaluators.
JANUARY, 30th			Assessment from the external evaluators. Final version of the Doctoral thesis.
MARCH Final evaluation	-----		Final discussion with an external (national – international) evaluation committee.

1. **Planning**

Seminars and Reports will be organized for thematic areas and planned in different days depending on the availability of the Tutors. Dates for seminars and reports presentation can be planned by the Ph.D. students,

in agreement with their Tutors, and proposed to the Director of the Ph.D. about one month before the expected time. Members of the Department, Tutors and Co-Tutors of the Ph.D. Students must ensure their presence at the seminars and annual reports presentation.

2. **Training activities**

During the 3 years, each Ph.D. student must accumulate 180 didactic and research Credits, distributed as described in **Annex 1**. During the 3 years of the Ph.D. program will offer the following didactic activities:

- a. *Structured teaching from the Department Faculty*. In **D3A web page** are reported the courses offered by the Department Faculty for the next Academic year (2022-2023). Different courses are offered in English or with a tutorial English.
- b. *Seminars*. The Department is organizing different seminars with national and international experts. These seminars or other seminars from other departments of this University or those from other Universities/Organizations can be recognized as didactic activity.
- c. *Didactic excursion and conferences*. Didactic excursion and conferences organized by the Department, other departments of this University or other Universities/Organizations can be recognized as didactic activity.

3. **Criteria for admission to the subsequent year and to the final exam:**

- a. The PhD program has to be finalized to the high level scientific research work with the final aim to produce scientific papers. For two years after the Ph.D. we will continue to monitor the scientific outputs on international refereed journals (quoted in SCOPUS and/or WEB of SCIENCE). This must be remembered from the beginning, having clear the rules on the setting up and implementation of experimental trials and on the dissemination of the scientific results obtained (**Annex 2**).
- b. The quality of your PhD program will be assessed annually by the PhD committee (**Annex 3**) according to the following criteria:
 - b.1. For the admission to the **second year**, the student must demonstrate that:
 - have started the research activities with an appropriate scientific methodology and achieved preliminary results;
 - have attended about 10 credits of didactic activities;
 - have received a positive assessment on the 1st bibliographic seminar (**Annex 4**) and also by the two international referees, if requested. The **Outstanding** judgment can be given to those who present a paper on a peer reviewed journal or a publication-abstract in congress proceedings or have spent a period of research abroad (at least 3 months).
 - b.2 For the admission to the **third year**, the student must demonstrate that:
 - have developed the research activities with an appropriate scientific methodology with the achievement of the first relevant results.
 - have continued to follow the didactic activities (at least other 5 credits);
 - have received a positive assessment on the 2nd bibliographic seminar (**Annex 2**) and also by the two international referees, if requested. The **Outstanding** judgment can be given to those who present a further paper on a peer reviewed journal, or has already spent a period of research abroad (at least 3 months).
 - b.3. For the admission to **thesis discussion**, the student must demonstrate that:
 - have developed the Research activities within the PhD theme(s) according to an appropriate scientific methodology and reached significant results.
 - have followed all the prescribed didactic activities.
 - have produced, in the 3 years, at **least one paper on a peer reviewed journal**. The **Outstanding** judgment can be given only to those who present a paper accepted/published in refereed international journals quoted in SCOPUS and/or WEB of SCIENCE and have completed at least three months of research abroad.

4. **Final Thesis**

The doctoral thesis, accompanied by a summary in English or Italian, is written in Italian or English (or in another official EU language after approval by the Faculty Board).

The doctoral thesis must be prepared according to the standard format described at the following link:

<http://www.ingegneria.univpm.it/content/template-scuola-di-dottorato-scienze-dellingegneria>

For the new National rules for Ph.D. program, the thesis, with a report on the activities of the 3 years and the list of publications attached, is evaluated by at least two highly qualified Professors (thereafter called “evaluators”), belonging to national or international institutions and not involved in the issuing of the Ph.D. title. The evaluators will provide a detailed written judgment on the thesis and propose the admission to public discussion or postpone it for a period, not exceeding six months, for significant additions or corrections, if required. After this period, the thesis is in any case admitted to public discussion, accompanied by a new written opinion of the evaluators made in the light of the corrections and or additions provided. The public discussion is held in front of a commission whose composition is proposed by the Faculty Board following the Rules of the University. After the discussion, the thesis, with motivated collegial written judgment, is approved or rejected. The commission, by a unanimous vote, has the right to attribute the *Cum laude*.

5. Internationalization.

The internationalization of the Ph.D. program includes the certification of *Doctor Europaeus* that can be achieved with the following steps:

- a) Annual/final (at least from the 2nd year) reports and thesis assessed by 2 international peer reviewers.
- b) Training and research activities carried out at an external international organization (at least for 3 months).
- c) Annual/final reports and doctoral thesis written in English (or in another official EU language after approval by the Faculty Board).

Besides, Ph.D. students can carry out part of their research activities at universities or foreign institutions, subject to authorization by the Faculty Board.

The scholarship amount is increased by 50% during this period with a minimum duration of 30 days and a maximum of 18 months.

The Coordinator of the Course sends to the Rector, the authorization accompanied by the student request in order to increase the scholarship, before the beginning of the period abroad.

Ph.D. student may participate to ERASMUS programs, where this is explicitly mentioned in the ERASMUS agreements between UNIVPM and the foreign universities. The ERASMUS grant is additional to the (increased) scholarship. Further information may be requested to the Departmental Erasmus Coordinator, Prof. Raffaele Zanolì: r.zanolì@univpm.it.

6. Research funds.

The research activities, including participation to conferences and meeting, are supported by funds from the tutor of each Ph.D. student. Starting from the second year, each student is expected, in addition to the scholarship and depending on the availability of funds at the University, a budget for research activities in Italy and abroad, of an amount not less than 10% of the scholarship. If the student is not positively evaluated during the 3 years scholarship, or abandons it, the unused amount remains available to the institution, for the same purpose.

7. Guidelines for the preparation of the written reports and oral presentations. Written reports and oral presentations should be prepared in the following settings:

- systematic description of objectives and research activities undertaken in the first year.
- program of the research activities for the second year.
- Didactic activities followed in the year: table with titles, type of activity (internal/external, teacher/s, hours and calculating CFU); certificates of participation must be included.
- possible teaching activity – max 6 hours per year, in agree with the tutor. Additional hours per year must be authorized by the PhD coordinator.
- period(s) of staying abroad (conducted and/or planned in the year), with destination, time and activity.
- list of publications: papers and/or extended abstracts/abstracts in journals or conferences acta, dissemination activity, contribution to project reports.
- list of bibliography consulted.
- who aims for the title of European Doctorate must submit written and oral reports and thesis in English and expect to have two foreign experts as external evaluators of the thesis.

- for the oral presentation it is recommended to not exceed 15 slides, the presentation time is max 10 min.

8. **Guidelines for the preparation of the written report and oral presentation for the final examinations.** Summary of the objectives, activities and results achieved in the 3 years:

- didactic activities followed in the 3 years: table with titles, type of activity (internal/external, teacher/s, hours and calculating CFU); certificates of participation must be included.
- possible teaching activity carried out in the 3 years.
- period(s) of staying abroad (conducted in the 3 years), with destination, time and activity.
- total list of publications: papers and/or extended abstracts/abstracts in journals or conferences acta, dissemination activity, contribution to project reports.
- total list of bibliography consulted.
- those who aim for the title of European Doctorate must submit the final report and thesis in English and expect to have two foreign experts as external evaluators of the thesis.
- for the oral presentation it is recommended not to exceed 30 slides and a presentation time of 30 min. It should include summaries of research activities carried out and the most significant results.

9. **Course programs scheduled for the Academic Year 2022-2023**

In **annex 4** are listed the courses planned in 2023 including information on teachers, programs and timing. Dates and rooms of each courses will be updated depending to the teacher and room availability.

ANNEX 1. Credits (CFU) distribution between didactic and research activities.

Students must achieve, during the three years, 180 credits distributed as follows:

	Research Activities	Didactic Activities*	Reports*	Total
Year	*CFU (h x 25)	CFU (h x 6)	CFU (h x 25)	
1 st	35 (875)	20 (120)	5 (125)	60
2 nd	50 (1250)	5 (30)	5 (125)	60
3 rd	50 (1250)	5 (30)	5 (125)	60
Total	135 (3375)	30 (180)^(*)	15 (375)	180

***1 credit equals 6 hours of frontal teaching (at least 10 credits must be from courses organized by the Faculty Board) and 25 hours for research and for the preparation of reports and annual seminars.**

Annex 2 - Ten simple rules for structuring a research work aimed to produce scientific papers

Rule 1: Focus your paper on a central contribution, which you communicate in the title

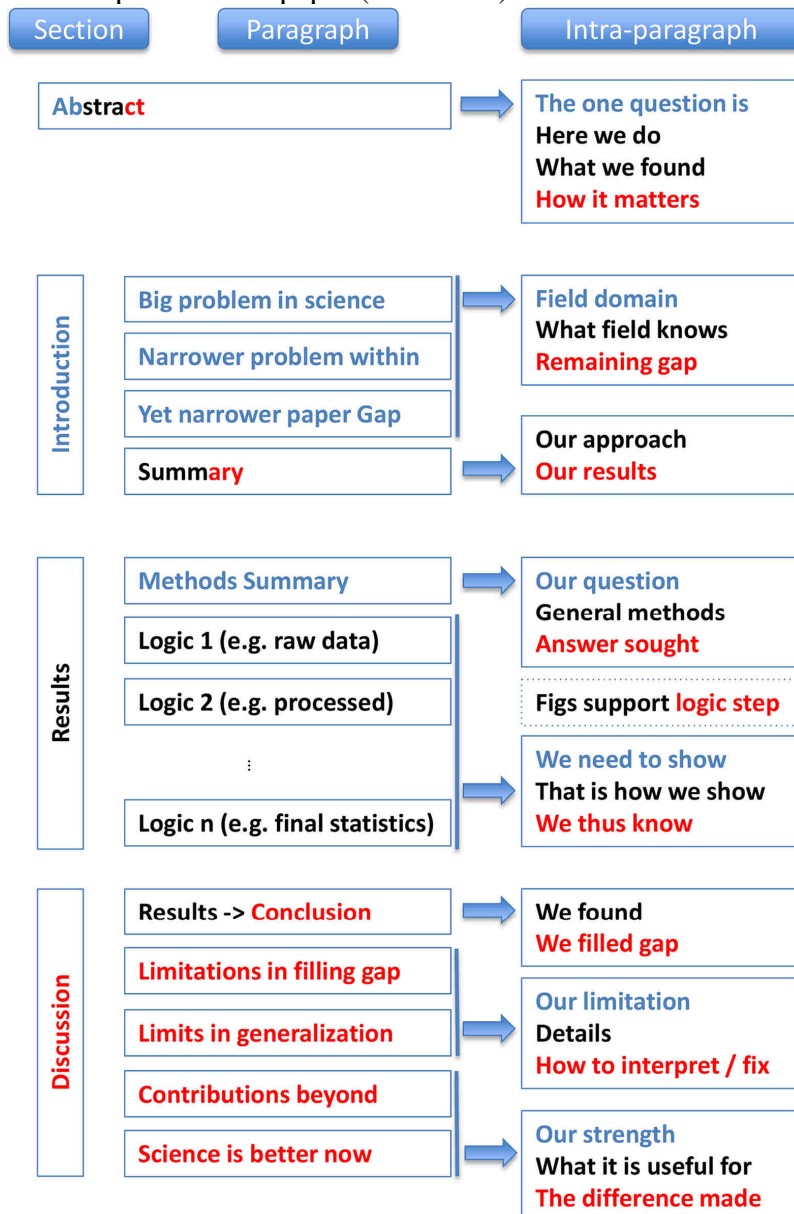
Rule 2: Write for flesh-and-blood human beings who do not know your work

Rule 3: Stick to the context-content-conclusion (C-C-C) scheme

Rule 4: Optimize your logical flow by avoiding zig-zag and using parallelism

Avoiding zig-zag - Using parallelism.

The components of a paper (Rules 5–8)



Rule 5: Tell a complete story in the abstract

Rule 6: Communicate why the paper matters in the introduction

Rule 7: Deliver the results as a sequence of statements, supported by figures, that connect logically to support the central contribution

Rule 8: Discuss how the gap was filled, the limitations of the interpretation, and the relevance to the field

Rule 9: Allocate time where it matters: Title, abstract, figures, and outlining

Rule 10: Get feedback to reduce, reuse, and recycle the story

Rule	Sign it is violated
1: Focus on one big idea	Readers cannot give 1-sentence summary.
2: Write for naive humans	Readers do not “get” the paper.
3: Use context, content, conclusion structure	Readers ask why something matters or what it means.
4: Optimize logical flow	Readers stumble on a small section of the text.
5: Abstract: Compact summary of paper	Readers cannot give the “elevator pitch” of your work after reading it.
6: Introduction: Why the paper matters	Readers show little interest in the paper.
7: Results: Why the conclusion is justified	Readers do not agree with your conclusion.
8: Discussion: Preempt criticism, give future impact	Readers are left with unanswered criticisms and/or questions on their mind.
9: Allocate time wisely	Readers struggle to understand your central contribution despite your having worked hard.
10: Iterate the story	The paper’s contribution is rejected by test readers, editors, or reviewers.

<https://doi.org/10.1371/journal.pcbi.1005619.t001>

Read this article:

<http://journals.plos.org/ploscompbiol/article?id=10.1371%2Fjournal.pcbi.1005619>

ANNEX 3. Evaluation form for seminars held by the students

Date of seminar: _____

Name of the student: _____ **year:** _____

Title of the seminar: _____

Mark related to:

1) Relevance to the proposed topic: _____

2) Literature knowledge: _____

3) Reporting capacity: _____

4) Organization of the material and respect of the timing: _____

Overall evaluations: _____

Comments: _____

Date of seminar: _____

Name of the student: _____ **year:** _____

Title of the seminar: _____

Mark related to:

1) Relevance to the proposed topic: _____

2) Literature knowledge: _____

3) Reporting capacity: _____

4) Organization of the material and respect of the timing: _____

Overall evaluations: _____

Comments: _____

Date of seminar: _____

Name of the student: _____ **year:** _____

Title of the seminar: _____

Mark related to:

1) Relevance to the proposed topic: _____

2) Literature knowledge: _____

3) Reporting capacity: _____

4) Organization of the material and respect of the timing: _____

Overall evaluations: _____

Comments: _____

(A= Out standing; B= Very good; C= Good; D= Sufficient; E= Poor)