



Ph.D. Course in Drug Sciences

Corso di Dottorato di Ricerca in Scienze del Farmaco

XL Cycle

Statement of the Rights and Responsibilities of the Ph.D. students

Carta del Dottorato





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1. Course Description

The Ph.D. Course in Drug Sciences (*Corso di Dottorato di Ricerca in Scienze del Farmaco*) is organized by the Food and Drug Department (*Dipartimento di Scienze degli Alimenti e del Farmaco*) of the University of Parma. The Course consists of research and educational activities and it is completed with the submission and defense of a Doctoral Thesis.

The Ph.D. Course program takes three years, during which multidisciplinary activities and changes of scientific environment are strongly encouraged. It is aimed at the preparation of Ph.D. graduates (*Dottori di Ricerca*) having scientific knowledge and research experience in the design, discovery, development, production and control of drugs and health products, as well as in the investigation of mechanisms of action for drugs and bioactive compounds.

The Board of Teachers provides Supervisors and offers courses and seminars in different scientific areas, with particular focus on medicinal and bio-organic chemistry, pharmaceutical technology, pharmacology and biochemistry. Contributions from different scientific areas and inter-disciplinary courses are also included.

The research project of a Ph.D. student has to be consistent with one of the major areas covered by the Course: i. Drug design and synthesis; ii. Biopharmaceutics and drug delivery; iii. Experimental pharmacology and toxicology; iv. Biochemistry, biophysics and molecular biology; v. Bio-organic chemistry.

The position of Ph.D. student is to be considered an exclusive full-time employment (*Art.12 c.1 DM 45/2013*). A notable exception is represented by "Industrial Doctorate" Ph.D. students that are employee of a Company that stipulated an agreement with University of Parma.

The present document summarizes the organization of the Course and represents an agreement among the parts involved, i.e. Ph.D. students, supervisors, tutors and members of the Board of Teachers, that are considered to be fully aware of relevant Italian laws and internal rules about the Ph.D. Courses (*Regolamento dei corsi per il consequimento dei dottorati di ricerca* - https://www.unipr.it/node/32190).

2. Definitions, Rights and Responsibilities

2.1. Ph.D. Student (Studente di Dottorato, Dottorando)

- Ph.D. Students have access to education, supervision and training. This includes access to Supervisor's laboratories and research facilities at the Food and Drug Department or at other Departments of the University of Parma.
- Ph.D. Students have the right to receive evaluation of their progress and to be informed on the criteria upon which their evaluation is based. Students can discuss such research goals and progress evaluations with their Supervisors. Reasonable warning should be provided in advance of dismissal based on failure to make satisfactory academic progress.
- Ph.D. Students have the right that their contribution to the results of research activity is acknowledged. The PhD student, the Supervisor and other relevant parties involved in the research activity have to discuss extensively regarding the expectations for student contributions and the nature of the acknowledgement. Ph.D. students and their Supervisors have to be aware and follow the guidelines of the University of Parma





regarding good practices and ethics in research (*Linee Guida per la Buona Pratica Scientifica e Disseminazione della Ricerca* - https://www.unipr.it/ricerca/ricerca-ateneo/buona-pratica-nella-ricerca).

- Ph.D. Students of each cycle elect a delegate who participates to the meetings of the Board of Teachers to discuss organizational and didactical issues.
- Ph.D. Students must be aware of and accept all the regulations of the University of Parma (https://www.unipr.it/ateneo/albo-online/regolamenti);
- Ph.D. Students have the responsibility to keep themselves informed about the requirements of their program and to dedicate appropriate effort to meet these requirements; in particular, they have the responsibility to fulfill their commitments and duties regarding research and educational activities.
- Ph.D. Students have the responsibility to understand and fulfill their role in developing and maintaining a professional relationship with their Supervisor. This includes the responsibility for communicating regularly with him/her, maintaining a mutually agreed schedule of meetings, and informing supervisor about the current status of their research work, any expected deviations from the agreed program of studies and any unanticipated absences.
- Ph.D. Students have the responsibility to recognize the contributions to their research results made by their supervisor and other colleagues. This includes maintaining confidentiality until it is agreed results can be published, and to agree any form of disclosure (including via social media) with the Supervisor.
- The Ph.D. student has the responsibility to collect documents attesting his/her participation to educational activities, and to report each year these activities to the Supervisor and the Board of Teachers.
- For five years after the end of the Course, the Dottore di Ricerca agrees to fill a questionary about his/her professional career.

2.2. Supervisor (*Relatore di tesi*) and External Advisor (*Co-tutore*)

At the beginning of the Course a Supervisor (*Relatore di tesi*), selected among the members of the Board of Teachers, is assigned to each Ph.D. student by the Board. If significant activity is performed by the Ph.D. Student out of the Supervisor's lab, an External Advisor (*Co-tutore*) can support the research work, but the Ph.D. Student still has to refer to the Supervisor for what concerns the Course programme.

The Supervisor has the responsibility to agree with the Ph.D. student a research plan and the schedule of educational activities and to follow his/her progress.

The Supervisor has the responsibility to guarantee the conditions that allow to perform research work regularly. This includes access to equipment, facilities, material and documentation. This responsibility is shared with the External Advisor for the research activity performed by the Ph.D. student out of the Supervisor's Department.

The Supervisor discusses with the Board of Teachers about the progress of research work and educational activities, in order to admit the Ph.D. student to the following year of the Course and to the final examination.

Before the end of the course, the Supervisor proposes to the Board of Teachers two external evaluators for the Ph.D. thesis.

When the collaboration between a Ph.D. student and his/her Supervisor is compromised, each of them can ask for a re-assignment to the Coordinator, who tries to settle the dispute. If, for any reason, the collaboration cannot be restored, the Coordinator asks the Ph.D student and the Supervisor to express their points of view in written documents and presents these documents to the Board of Teachers. The Board can re-assign the Ph.D. student to another Supervisor or take any different decision; the decision taken by the Board of Teachers is considered to be final.

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2.3. Board of Teachers (Collegio dei Docenti)

The Board of Teachers takes care of:

- assigning a Supervisor to each PhD student;
- stating the requirements of research work and educational activity;
- approving, at the end of every academic year, the Ph.D. student's research work and educational activity, admitting him/her to the next year in case of positive response;
- approving, at the end of the last academic year, the Ph.D. student's research work and educational activity, admitting him/her to the final evaluation in case of positive response:
 - assigning thesis evaluators and, if required, reviewers for the additional title of Doctor Europaeus;
 - proposing the Commission for final evaluations to the Magnifico Rettore.

The members of Board of Teachers must participate to formative and educational activities, teaching, courses and seminars. They must produce relevant research results in the scientific fields object of the Ph.D. Course.

The list of Board of Teachers is updated every year and is published on the Course website.

2.4. Ph.D. Course Coordinator (Coordinatore del Dottorato di Ricerca)

The Coordinator of the Course:

- updates the composition of the Board of Teachers and summons its meetings;
- fills the forms to ask for activation of new cycles and to prepare the call for new Ph.D. students;
- organizes educational activities on general skills, scientific reporting and foreign language;
- authorizes secondment of Ph.D. students in foreign countries; for periods higher than six months, an opinion by the Board of Teachers is required;
- authorizes Ph.D. students to perform teaching activities;
- authorizes Ph.D. candidates to deposit their Ph.D. Theses;
- takes relationships with Institutes and Companies to favor Ph.D. activity and employment.

For temporary vacation, these roles are assigned to a vice-Coordinator.

2.5. Head of Department (Direttore di Dipartimento)

The Head of the Department guarantees that the conditions of learning, teaching and research that are appropriate and reasonable for their discipline. This includes financial support for research work, participation in educational activity and travelling, provided that the relative items of expenditure are funded.

3. Requirements of the Course

3.1. Course organization

The Course takes three years. It requires accomplishment of a **research work** and **educational activities**. Each Ph.D. student undertakes a research project, working with her/his Supervisor, and follows specific courses and other educational activities. Educational activities concur to the accumulation of credits





necessary to complete the Ph.D. Programme. In the European Credit Transfer and Accumulation System (ECTS), 60 ECTS credits are the equivalent of a full year of study or work. Considering that educational activities require additional time of individual study, the Board of Teachers has established on February 20th, 2020 that one ECTS credit (briefly, ECTS) can be achieved attending 6 hours of lessons or seminars, or participating to 1 day of National or International Schools or Workshops. For research activity, one ECTS corresponds to 25 hours (approximately 5 ECTS per month of full-time work).

To complete her/his 3-year Programme, a Ph.D. student must accumulate 180 ECTS, including **at least 20 ECTS in educational activities**. An Annual Report certifying the activities accomplished during each year must be delivered by the Ph.D. Student to her/his Supervisor, who will present it to the Board of Teachers for admission to the next years of the Programme or to the final examination.

Each Ph.D. student agrees with his/her Supervisor a research plan and a schedule of educational activities, fulfilling the requirements stated by the Board of Teachers.

Under specific agreements between University of Parma and a partner University, it is possible to establish joint Ph.D. Programs.

3.2. Research work, secondment and tutoring activity

At the beginning of the Course, Ph.D. students present to the Coordinator a written description of their research plan, approved by their Supervisors.

The research plan will include:

- a title;
- a brief description of the state of the art;
- the specific objectives and methods of the project;
- expected results, phases and milestones.

Each Ph.D. student delivers a seminar to the Board of Teachers and to other PhD students, within three months from the beginning of each Course year (generally in January or February). The first seminar is dedicated to the research plan, the following ones to research progresses.

The Ph.D. student interacts with his/her supervisor to check research progress, to analyze results and to discuss possible modifications of the plan.

Before the end of each academic year, Ph.D. students present to their Supervisors and to the Board of Teachers a written report (within the Annual Report cited above) about research progress and possible plan modifications. Admittance to the next year of the Course depends on a positive evaluation of this report.

At least a draft for a publication or patent application is expected to be presented to the Supervisor within the end of the second year.

A secondment in a distinguished external institution, possibly in a foreign Country, for a period of time of 3-18 months, is strongly encouraged. Ph.D. student's mobility can be supported by the ULLA mobility program, Erasmus program or other programs organized by the University. Secondments in foreign Countries have to be approved by the Coordinator or, for periods longer than 6 months, by the Board of Teachers.

Ph.D. students must ask for authorization from the Coordinator to perform teaching or tutoring activity. This may consist of: complementary teaching in institutional courses, within 40 hours per year; tutoring of





undergraduate students for their graduation thesis. These activities do not imply any obligation for the University.

3.3. Educational activities

Educational activities attended by Ph.D. students during the three years of the Programme are distributed among different kinds of activities, following approximately the partition detailed in the table below. Significant deviations from this plan, agreed in advance by the Ph.D. student and her/his Supervisor, have to be approved by the Board of Teachers.

| Educational Activity | ECTS |
|---|------|
| Seminars | 4 |
| National or International Schools / Workshops | 8 |
| Courses on specific topics | 4 |
| Interdisciplinary courses | 4 |

Seminars

Ph.D. Students can deliver seminars, beyond those dedicated to their research activity, about scientific issue related to their research activity or field of interest, or attend seminars offered by the University or by other Institutions, including those delivered by the Board of Teachers members or by invited teachers.

Participation to the seminars must be certified through a form reporting the date, speaker and duration of the seminars, signed at the end of each seminar day by the speaker or by a member of the Board of Teachers.

One ECTS is assigned every (approximately) 5 hours of seminars attended or delivered by the Ph.D. student.

Schools and workshops

Every two years, the ULLA European university consortium for pharmaceutical sciences (Uppsala, London, Leiden-Amsterdam, Copenhagen, Paris, Parma, Leuven, Helsinki, Geneve; https://ullapharmsci.org) organizes a one-week ULLA Summer School offering, in parallel sessions, one- or two-days courses on specific and inter-disciplinary topics. Free participation to at least one ULLA Summer School is offered to each Ph.D. student in Drug Sciences. Participation other National or International Schools or Workshops is strongly encouraged, with participation fees covered by Supervisor's funds.

One ECTS is assigned for each day of School or Workshop attended by the Ph.D. student.

Specific and interdisciplinary courses

Every academic year, short courses on specific or interdisciplinary topics, specifically addressed to Ph.D. students in Drug Sciences, are offered by teachers of the Board and by external teachers. These courses are approved by the Board of Teachers and their description is published in the Ph.D. course website.

The Ph.D. School in Sciences and Technologies and other Institutions at the University of Parma offer other specific and interdisciplinary courses, including interdisciplinary ones (e.g. regarding language and computer skills, research management/networking and intellectual property). These courses are also described in the Ph.D. course website.





The number of ECTS assigned for each course specifically addressed to Ph.D. students is reported in course description.

Ph.D. students are also encouraged to consider other courses that can improve their scientific and technical growth. Courses from post-graduate curricula, and in some cases also from undergraduate ones, can concur to ECTS accumulation for educational activities. Assignment of the suitable number of ECTS is proposed by the Ph.D. student and her/his Supervisor to the Board of Teachers, considering the duration of the course, its level and the congruity with scientific areas covered by the Ph.D. Programme in Drug Sciences.

3.4. Final commitments

At the end of the third year, the Ph.D. student presents to his Supervisor and to the Board of Teachers a report describing:

- the research work performed and the main results achieved;
- the educational activities performed and attended;
- a list of publications, congress reports and acknowledgments

At least one original research aricle drafted or submitted for publication or patent application is expected.

The Ph.D. student produces a Thesis, written in English, with the results of research work. The Thesis describes, in an original way, the research work performed by the Ph.D. Student, the results achieved, including those of collaborative work, and the scientific context. Within the thesis, other people's work must be properly attributed and acknowledged, avoiding any kind of plagiarism. While avoiding copyright infringements in reproducing published work, a Ph.D. student can include work and results that has been previously published, provided that he appears as a co-author and that the publication is properly referenced.

3.5. Course evaluation

In compliance with the ANVUR Guidelines for the self-assessment, evaluation and accreditation of universities and study courses - AVA 3 – the PhD students at the end of the first and second year of the course must fill out an anonymous questionnaire reporting their opinions on the course.

At the end of the third year of the course, PhD students are required to complete the Alma Laurea Questionnaire to evaluate their study course.

3.6. Title achievement

On the basis of the report presented by the Ph.D. student, and of the Supervisor's advice, the Board of Teachers admits the Ph.D. Student to the final evaluation.

Before the final examination, the Thesis has to be refereed by two external evaluators, who express a written judgment. The evaluators can accept the thesis, allowing its presentation for the final evaluation, or delay it for no more than six months, asking for integrations or amendments. In the last case, the thesis is forwarded to final examination with an additional judgment of the evaluators about integrations and amendments.

Final evaluation is public and made by a Commission appointed following University rules. At the end of the final evaluation, the thesis can be approved or rejected (See Art. 8 c. 6 DM 45/2013).





Under application by the Ph.D. candidate and favorable opinion by the Board of Teachers, University of Parma can emit the Certificate of "Doctor Europaeus", as defined by the European University Association, when (see also *Regolamento dei corsi per il conseguimento dei dottorati di ricerca* - https://www.unipr.it/node/32190):

- 1) the Ph.D. thesis work includes a secondment of at least three months in a foreign EU Country;
- 2) the Ph.D. student presents two positive judgments by researchers from two foreign EU Countries;
- 3) the Commission for the final evaluation includes at least one member from a foreign EU Country;
- 4) during the final evaluation, thesis is discussed in Italian and in another language of a foreign EU Country.

XL Cycle

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4. Agreement

We, the undersigned, hereby declare to accept what stated in the document "Statement of the Rights and Responsibilities of Ph.D. Students" for the Ph.D. Course in Drug Sciences - XL cycle.

| The Ph.D. student , | | | | | |
|-------------------------------------|----------------|------------|------------------------|--|--|
| email: | | | | | |
| Date | | Sign here: | | | |
| The Supervisor, | Prof | | | | |
| Date | | Sign here: | | | |
| The External Advisor, | | | | | |
| Date | | Sign here: | | | |
| The Coordinator , | | | Prof. Fabio Sonvico | | |
| Date | | Sign here: | | | |
| The Director of the Food and | l Drug Departn | nent, | Prof. Gianni Galaverna | | |
| Date | | Sign here: | | | |