

## REGULATION

### **Article 1: Scope and Purpose**

**1.a.** The degree of Doctor of Biological Sciences will be awarded in accordance with the provisions of this Regulation.

**1.b.** This title, for the greater degree of hierarchy within the Universidad Nacional del Litoral, will not be enabling as regards academic value for the practice.

**1.c.** The PhD is intended to complement and deepen the scientific training of university graduates in the area of Biological Sciences, enabling them to conduct research at the frontier of knowledge, representing significant progress and contribute to the enrichment of these sciences fields.

### **Article 2: Academicians**

The Academic Board of the PhD in Biological Sciences shall consist of: the Director of the program, the Academic Committee of Doctorate (ACD), Body Teachers (stable and guest lecturers), the Directors of Studies and the Directors and Co Thesis Directors. Its members must have a PhD (or equivalent training) and have a proven track record as a teacher and research scientist embodied in scientific or technological publications, recognized value in their subject area, and conducted during the previous five years. They shall be appointed by the Board.

### **Article 3: undergraduate degrees required for admission to the Ph.D.**

Candidates with a university degree in related careers shall be eligible to the field of biological sciences awarded by universities in the country or abroad, legally recognized, and whose curriculum allows for a rational articulation with the objectives of the PhD.

The Board, following a report by ACD, may require the approval of supplementary degree courses, according to the characteristics of the candidate, his/her career grade, and plan to propose a thesis.

Exceptionally, it will be enabled to whom, not possessing a degree, can justify such based on academic merits. For this, the applicant must prove that they have developed work activities

and/or academic areas or issues that according to the ACD the result is classified as relevant according to the study profile Career Ph.D. in Biological Sciences. In this case, the ACD will implement an evaluation of adequacy that it must be approved by the candidate to demonstrate proficiency in the discipline field that aims to develop his/her thesis. The ACD will issue a reasoned opinion that may contain the additional requirement of approved courses or sections of careers related to the area of the university graduate degree.

#### **Article 4: Curriculum**

The Doctorate in Biological Sciences is a program with a semi-structured curriculum with face to face classes.

It includes the approval of General Education courses and specific training and the completion of a doctoral thesis in accordance with the provisions of Article 5.

#### **Article 5: Requirements to access the Doctor of Biological Sciences degree**

The Ph.D. student must meet the following requirements:

**5.a.** Obtain accreditation of higher education courses for a minimum total of 330 hours, equivalent to twenty (22) Academic Credit Units (UCA). These courses should be of General Education (minimum 7 UCAs) and Specific Training (minimum 15 UCAs). An AAU is equivalent to 15 hours of academic activities. Courses must provide adequate training graduate content.

General Training Courses are mandatory and include: Epistemology and Methodology of Science, 45 hours (3 UCAs) and Applied Statistics. Design and optimization of experiments, 60 hours (4 UCAs).

At least 225 hours, equivalent to fifteen (15) UCAS, must correspond to specific training courses that will provide scientific support to PhD on aspects of the topic to be addressed in his/her thesis.

Doctoral students may apply for the recognition of courses taken no more than four (4) years from the time of admission to the program; in that case, the maximum UCAS recognized may not exceed 30% of the total allocated to courses. Eventually the CAD, prior informed opinion shall suggest to the CD accreditation of a higher percentage UCAS in respect of previous activities.

**5.b.** Post some of the main contents of the thesis in journals of international circulation that is of recognized scientific value within your subject area and with expert arbitration. By working with such content, it should be published or accepted for publication as a prerequisite for the presentation of the thesis referred to in paragraph 5.c

**5.c.** Present and defend a thesis that constitutes a contribution to scientific or technological knowledge in the field of biological sciences, make it personal, original, meaningful and rigorously substantiated. In this sense, it is essential that the development of the thesis is mainly focused on biological systems, regardless of the level of organization that is proposed in the study, both basic and applied studies (as constitutes a real innovation), with the implicit originality of the topic.

The thesis work, from planning to its defense, will be under the supervision of a Director. If deemed necessary, it may also include a co-director. The presentation and defense of the thesis is assigned a total of seventy-eight (78) UCAs.

#### **Article 6: Application for admission to a Ph.D. Career**

The application for admission to a Ph.D. career will be made by a letter addressed to the Dean of the Faculty of Biochemistry and Biological Sciences, and will lead to the opening of a file in which all actions will be carried out for the implementation of this Regulation. The application must be accompanied by:

**6.a.** Curriculum vitae of the applicant, which shall be an affidavit.

**6.b.** Certified copy of a university degree and the necessary documentation to allow judgment on the level and content of the degree course, attaching a copy of the transcript of the studies. Applicants from foreign universities must submit the analytical plan of studies.

In this case, the documents certifying the university degree must be legalized in the country of origin by the relevant education authority, Ministry of Education or the like, the Argentine Consulate in that country and, if applicable, the Apostille of The Hague.

**6.c.** A thesis plan, presented simultaneously in paper and electronic format, shall contain the following information:

I. Title

II. Introduction

III. Objectives

IV. Brief description of the original projected contribution

V. Methodology and timetable

VI. Workplace, facilities available funding sources, and dedication of the applicant.

**6.d.** The application will be supported by the candidate who will propose a Ph.D. Thesis Director, and Co-director, if applicable. This guarantee will mean the commitment by the candidate to the Director and Co-Director to assume the obligations of academic supervision and, in particular, of the terms and obligations under this Regulation.

**6.e.** The curriculum vitae of the candidates for Director and Co-director (if applicable) of the thesis should be in accordance with the instructions in Annex II. The information contained therein shall be filed as an Affidavit.

**6.f.** Agreement responsible for the workplace.

#### **Article 7: Admission, withdrawal and readmission**

**7.a.** The ACD considers the documentation submitted in the application for admission and, if necessary, interviews the applicant. He/she also consults, regarding the thesis plan, one or more evaluators who meet the requirements of a thesis supervisor (Art. 8). After this step, the ACD could ask another opinion in order to recommend to the Board the admission or the rejection of the candidate, in both cases the arguments must be well founded. In case of rejection, the candidate may resubmit and correct the reasons that led to the previous rejection.

**7.b.** The ACD proposes, together with the recommendation of the admission of the applicant to the CD, the appointment of a Director of Studies, which must meet the requirements of Art. 8 of these Regulations for the Directors/Co-directors of the thesis.

The appointment of the Director of Studies shall be communicated to the Ph.D., Director and Co-director of thesis (if any), who within five (5) working days from the notification may recuse within reason. These are grounds for disqualification or a challenge, the same as those provided for in Regulation Contests for Teachers, and should be resolved by the Board in a period not exceeding thirty (30) working days and its final ruling. If the recusal is appropriate, the Board shall, within thirty (30) working days, design a person who replaces the Director of Studies recused.

**7.c.** The conditions for quitting the Program:

- Failure to annually enroll in the Graduate Student System.
- Qualification as "unacceptable" in two (2) Annual Reports.

- The expiration of the maximum duration of the program, six (6) years. Before a duly substantiated doctoral candidate with the support of his/her management team, the ACD application CD may recommend the granting of an additional period, which shall not exceed one (1) year.

**7.d.** Anyone who has lost his/her status as a Ph.D. student for any of the reasons specified in this Regulation may request readmission to this program only once. If you were granted readmission, it shall proceed in accordance with the provisions of Art. 6.

#### **Article 8: Requirements to be met by Directors and Co-Thesis Directors**

**8.a.** They may be Thesis Directors the professors of the Universidad Nacional del Litoral, with a history in the disciplinary field of the Thesis Plan. When circumstances warrant, it may designate a teacher or researcher from another institution who meets the above requirements. In this case, a co-director will be designated who should fulfill the requirements of the Article 8, subsection g.

**8.b.** The Director shall have attained the maximum title in his career (Ph.D.). Without this, only extraordinary cases will be considered and analyzed by the CAD.

**8.c.** The Director must have accredited human resources training, especially in postgraduate courses.

**8.d.** The Director shall be an active research scientist in the work area in which he/she intends to direct the Ph.D. student. To evaluate that, it will be considered all the publications in journals with international circulation of recognized scientific value within your subject area, conducting expert arbitration, as well as patents and other scientific and technological activities that the Director has made during the last five (5) years.

**8.e.** Depending on your background, each Director and/or Co-director (where applicable) can simultaneously run up to four (4) theses developed in the field of different doctorate programs; an exception to this must be duly substantiated.

**8.f.** The applicant, with the agreement of the Director, may propose the appointment of a Co-Thesis Director. This requirement will be mandatory when the subject is interdisciplinary in nature.

**8.g.** The Co-Director shall be a researcher with a relevant scientific background, obtained in the last five (5) years in the disciplinary field related to the thesis work proposed. If the proposed

director is not a professor at UNL, the Co-Director must be.8.h. At least one (1) of the members of the counseling team must work in the field on which the thesis is based.

#### **Article 9: Functions and responsibilities of the Director and Co-Director of the Thesis**

The functions and duties of the Director and Co-director (if any) Thesis:

- 9.a.** Prepare the Plan with the Ph.D. thesis.
- 9.b.** Provide the material means necessary for the work of the Ph.D. student.
- 9.c.** Advising the Ph.D. student during the execution of the Plan as well as drafting the manuscript of the thesis.
- 9.d.** Endorse all the activities and presentations of the student.
- 9.e.** Participate in the issuance of at least one course that integrates the curriculum of this Ph.D. program. Each course will be issued with a minimum frequency of once every three (3) years. Those Directors and Co-Directors who violate this obligation will not be accepted in that capacity in new presentations, until giving effect to it.

#### **Article 10: Workplace**

The workplace can be any Research Center, state or private, that in the opinion of the Academic Committee of the Ph.D., allows the realization of thesis work. In situations deemed necessary for the fulfillment of the thesis work, the Ph.D. student may undertake stays at other research centers in the country or abroad, with the support of his/her management team.

#### **Article 11: Duration of the Program**

- 11.a.** The deadline to meet the requirements to obtain the Doctor of Biological Sciences degree is six (6) years from the date of admission, except the considerations set out in Article 7 subsection c.
- 11.b.** Temporary suspension of the period: The Ph.D. student may request the suspension of the effect of the period established in Article 11. a.; periods may not exceed two (2) years. These suspensions may be agreed by the Board, with a first opinion of the CAD

**Article 12: Absence or change of the Director and/or Co-Director thesis plan change and/or workplace**

**12.a.** In case of temporary absence of the Director of Thesis for a period of six (6) and twelve (12) months, and if the defendant was not appointed a Co-Director, the Ph.D. student may propose to ACD the appointment of a Co-Director in accordance with the provisions of Article 8.

**12.b.** If because of impairment the Thesis Director cannot fulfill his/her duties for a period longer than one (1) year or resignation, the Ph.D. student will propose the appointment of a replacement, which will be in accordance with the provisions of Art. 8.

**12.c.** The Ph.D. student may propose, during the development of the program a change of the thesis director. This proposal should be well founded and it should be communicated to the actual director, after that, the ACD will give its opinion. The Board shall decide on it. The eventual appointment of a new Director shall comply with the provisions of Article 8.

**12.d.** Once the thesis plan is approved, the Ph.D. candidate, with the support of his/her management team, may propose a change in the title and/or thesis topic.

This proposal should indicate whether this change involves only the title of the thesis or if it involves changes in the objectives and work plan presented in the application for admission to the program. In the latter case, you must attach the justification and definitive plan. The Board decides whether to approve the change on the report of CAD.

**12.e.** The Ph.D. student may propose, in the course of the program, a change of workplace. This proposal should be founded and endorsed by the Director and Co-director (if any) of the Thesis. The Board shall decide on it, after the opinion of the CAD.

**Article 13: Roles and responsibilities of the Director of Studies**

The functions and duties of the Director of studies:

**13.a.** Make suggestions and/or recommendations to the Ph.D. student during the execution of the Plan, maintaining, if deemed necessary, meetings with the thesis student and his/her management team.

**13.b.** Evaluate Progress Reports Annual Work Ph.D. Thesis and issue an opinion based on them.

**13.c.** He/she can integrate the Jury Thesis.

**13.d.** When there is an 'inability to continue serving as the Director of Studies', this must be communicated reliably by a note addressed to the Dean of the Faculty. In this case, the CD, after consulting the CAD, shall appoint another Director of Studies in accordance with Article 7.b.

#### **Article 14: Monitoring the student**

In the month of March of each year, the Ph.D. student presents him or herself at the Graduate School of Biochemistry and Biological Sciences for the consideration of CAD, an annual report of its activities in the program, in writing and in electronic format that must contain:

1. Job Title Thesis, first name and last name Ph.D., Director, Co-director, if any- and Director of Studies and date of admission to the program.
2. Postgraduate courses approved for requesting accreditation. In the case of courses that were not taught in the Faculty, it shall provide the information required in Art.15 for accreditation.
3. List of Publications and/or presentations to Congress, attaching the relevant documentation.
4. Completing stays at other research centers in the country or abroad briefly indicating the activities and whether they have resulted in joint productions.
5. Status of the thesis. This report must present the background, working hypotheses and objectives, followed by a description of the methodology, the results and preliminary conclusions. You must specify the degree of progress and supplemented by a business planning to develop in the coming year.

With the information provided and the opinion of the Director of Studies ACD evaluate these presentations and qualify as "Acceptable" or "Unacceptable". If a report is considered "Unacceptable", the Ph.D. student must respond within a period of sixty (60) days, observations and, if necessary, attend an interview with CAD, accompanied by his Director and Co-Director (if any). If after this instance the ACD considered that the reasons for rejection were reversed, the annual report will be considered "Acceptable".

#### **Article 15: Accreditation of Postgraduate Courses**

Postgraduate Courses conducted by the PhD student will be accredited if they meet the following requirements:

**15.a.** Belonging to the student training plan, which must be endorsed by the Director and Co-director (if any) of the Thesis.

**15.b.** It should be approved by the Board of the Faculty as a course of the postgraduate program. (according to Regulation Course).

Postgraduate Courses developed in other faculties of the Universidad Nacional del Litoral or other universities and institutes in the country or abroad will be accredited by the ACD. For this, the Ph.D. student must inform the program, responsible for dictation, workload, evaluation system, and location, certifying if it belongs to a career of the Ph.D. or not.

The ACD assigns the corresponding UCAs taking into account the following criteria:

- one (1) UCA equivalent to 15 hours of academic activity.
- courses of less than 30 hours will not be allocated credits.
- the maximum UCAs to assign a course is four (4), even when the course has more than 60 hours.

#### **Article 16: Establishment and operation of the Thesis Jury**

**16.a.** The Ph.D. student, after fulfilling the requirements of Article 5, subsections a and b of this Regulation, may request addressed to the Dean note, the constitution of the Jury thesis. This will be appointed by the Board on the proposal of CAD.

**16.b.** Thesis Jury shall consist of three (3) members and two (2) alternate members, all of which must meet the requirements of Art. 8 for the Directors and Co-Thesis Directors. At least two (2) of the members shall not belong to the Universidad Nacional del Litoral.

**16.c.** The composition of the jury will be communicated to the Ph.D. student, who within five (5) working days from the notification may reasonably be entitled to reject any or all of its members. The grounds for recusal or challenge will be the same as those provided for in Regulation Contests for Teachers and should be resolved by the Board in a period not exceeding thirty (30) working days, and its final ruling. The same rules apply in the case of the inhibition of the Jury members. If the recusal is appropriate, the Board shall design who will replace the rejected jury, within thirty (30) working days and with a proposal by the CAD.

**16.d.** The members proposed for the constitution of the Jury shall agree after consultation through the Graduate School of Biochemistry and Biological Sciences.

**16.e.** Jury decisions are made by majority.

#### **Article 17: Presentation of the manuscript Thesis**

Once the requirements established in Article 5, subsections a. and b. are fulfilled, the PhD student may submit the manuscript of his/her thesis, according to the Annex I of this Regulation. The ACD will conduct a review of the formal aspects of the issue and make the recommendations it seems appropriate. When the manuscript meets the requirements of this regulation, the ACD through the Graduate School of Biological Sciences Biochemistry will send it to the jury.

#### **Article 18: Evaluation of the manuscript Thesis**

**18.a.** Each of the members of the Jury shall issue a reasoned, individually and in writing of the manuscript Thesis, opinion which shall state whether, in their opinion, the manuscript should be:

- Accepted without modification:

It is recommended to pass the instance of the oral and public defense.

- Accepted for defense with minor changes:

This means that the suggested corrections are minor, but must be answered and included in the manuscript doctoral thesis as a prerequisite to the act of oral defense and public or to the granting of the title, being at the discretion of ACD this decision.

- Returned for corrections:

This means that the corrections to be performed involve substantial comments on the content of the doctoral thesis. All must be answered and included in the manuscript of the doctoral thesis. The answers to these substantial comments and/or its corresponding changes to the manuscript will be sent to the jury for reevaluation, as a prerequisite to the act of oral and public defense.

- Rejected:

Means that the manuscript is not able to be approved, there are drawbacks in the proposition of work in terms of originality, methodology, discussion and/or conclusions.

The PhD student must respond in writing to the comments made by each member of the jury.

**18.b.** Jury members have a period of thirty (30) working days to issue its opinion, which may be extended for a second term of thirty (30) working days. At the end of these periods, the return of the manuscript to whoever is in default shall be required, and request the Board to rescind its designation, appointing a replacement.

**18.c.** An opinion not founded will be returned by the ACD to the member of the Jury who will have a term of fifteen (15) days to substantiate it. After this period, it will be required to return the manuscript, and request the Board to rescind its designation, appointing a replacement.

**18.d.** If the jury rejects the submitted manuscript, the Ph.D. student will have the option to submit a new manuscript before one (1) year, which will be evaluated as established in the preceding paragraphs. If this new manuscript was not submitted on time, or if it was again rejected by the jury, the Ph.D. student will lose his/her status.

**Article 19: Oral presentation of the thesis work**

**19.a.** When the resulting Thesis written work accepted by most members of the jury, the ACD request the Dean to set the date for the PhD student to defend it in public session. After a free exposure of no more than forty-five minutes of the Ph.D. student, the jury should promote a discussion on the content of the thesis. This debate will consist of two parts: only the Ph.D. student and members of the jury may participate in the first part. In the first part the student answers the questions of the jury, in the second part, the debate will be opened to the rest of the audience, including the Director and Co-director (if any).

**19.b.** After the oral defense of the thesis, the Jury will write and endorse an Act with its opinion, which will be read to the Ph.D. student by one of the members of the jury. In the same act, there shall be included the opinions of the majority and the minority, if any, and the grade obtained on the basis of the grading scale in force in the field of Universidad Nacional del Litoral.

**19.c.** If the majority of the Jury disapprove the oral defense, will be passed to a recess within thirty (30) days after the defense to reiterate days.

**19.d.** The Board will consider the opinion of the jury after intervention by CAD, and in case of approval, award the title and approve the management diploma.

**19.e.** The opinions expressed by the Ph.D. student, before or after approval of the thesis, are their sole responsibility and not the responsibility of the university, its institutions or the juries.

#### **Article 20: Diploma Title**

Citizens who complete all the requirements of the Ph.D. will obtain the Doctor of Biological Sciences degree.

It is a requirement for the issuance of the degree that the student complies with the provisions of the fourth level of the UNL.

#### **Article 21: Copies of the final Thesis Work**

After the oral defense of the thesis, the Ph.D. student must submit to the Faculty two (2) copies of the written thesis work in its final version. The Faculty returned to the student one (1) copy, which shall carry the approval, citing the number of the relevant Board resolution and the list of the members of the jury.

The other copy shall be delivered to the Library of the Faculty.

Copies of the Thesis presented, approved or not, belong to the Faculty.

Moreover and in compliance with the provisions on this in the Regulation of the Fourth Level of UNL, the authors should deliver the digital version of the thesis to the Department of the Electronic Library of the Universidad Nacional del Litoral, according to the regulations

#### **Article 22: Exceptionality**

Any situation not covered by this Regulation shall be decided by the Board, with the advice of ACD.

## **REGULATION OF THE ACADEMIC COMMITTEE OF DOCTORATE (ACD)**

### **Article 1: Objectives**

The ACD will be to advise the Board in all that relates to the continuity, scientific and academic level of the Ph.D. in Biological Sciences, in accordance with the current regulations.

### **Article 2: Integration of ACD**

The ACD will consist of six (6) members and one (1) Coordinator. It will integrate this Committee as the Coordinator, the Director of Graduate School, or who was appointed by the Dean of the Faculty of Biochemistry and Biological Sciences to fulfill this mission.

### **Article 3: Designation of ACD members**

The six (6) ACD members shall be appointed by the Board at the proposal of the Dean. Five (5) of them must belong to the Faculty of the Program, while the remaining member will be a Ph.D. student.

The Program Director must be a member of the ACD. It will be appointed by the Governing Council on a proposal ACD endorsed by the Dean of the Faculty, and will act in the organization, coordination, management and supervision of the academic career. ACD members will be in office for four (4) years and may be reappointed. The renewal of the same will be done by halves, every two (2) years.

### **Article 4: Operation of ACD**

The ACD will run continuously during the academic year and shall be convened by the Coordinator. The quorum for the operation is four (4) members. Both the Coordinator and the Ph.D. student have a voice but no vote. Decisions are approved by a simple majority. In case of a tie, the decision will be the responsibility of the Program Director. ACD will apply to the current regime absences on the Committees of the Board of the Faculty.

### **Article 5: Functions ACD**

ACD functions are the following:

- 5.a.** Ensure proper compliance with this Regulation.
- 5.b.** Advise the Board of the School of Biochemistry and Biological Sciences regarding the admission, monitoring and egress of students of the Ph.D. program in Biological Sciences.
- 5.c.** Propose to the Board the approval of the proposal of graduate courses as part of the curricular offerings of the Program.
- 5.d.** Suggest to the Board the appointment of teachers-researchers who act as principals and teachers of the courses of Doctoral Studies, of the Directors and the Directors and Co-Directors of Thesis.
- 5.e.** Suggest to the Board the constitution of the thesis jury.
- 5.f.** Issue reports and opinions that require the Dean, the Board or the competent authority to make decisions on each case.
- 5.g.** Participate and collaborate with the Graduate in the processes of evaluation and accreditation of the program.

#### **Article 6: Powers of ACD**

The duties of ACD:

- 6.a.** To maintain, if necessary, an initial interview with each applicant to the Ph.D., evaluating the personal characteristics, level of training and scientific information, personal goals, and all other background that contributes to acquiring information based on real possibilities for meeting the demands of the program, in the framework of the aims set by the university. The interview will also like to inform the applicant about the characteristics of the program and the requirements to access the title. If appropriate, the ACD may delegate the conducting of the interview to the Coordinator and/or Director of the program.
- 6.b.** To require the students of the program, through the Coordinator, reports and antecedents, which should be presented on time under penalty of sanctions in case of default.