

PhD Course in Statistical Sciences

Department of Statistical Sciences, University of Padova

Vademecum

XXXIX Cohort PhD students

1 Calendar

The PhD academic year begins on 1 October and terminates on 30 September of the following calendar year. For the PhD programme, the year includes two study periods for foundation courses: the first one starts at the beginning of October and ends in late January; the second one starts at the beginning of February and ends in mid-June. Specialized activities run over all the PhD academic year. The official University holidays for year 2022/2023 are listed below.

- “Tutti i Santi” (“All Saints”): 31/10/2022 and 1/11/2023
- “Immacolata Concezione” (“Immaculate Conception”): from 8/12/2023
- Christmas holidays: from 23/12/2023 to 07/01/2024
- Easter holidays: from 29/03/2024 to 2/04/2024
- “Anniversario della Liberazione” (“Liberation Day”): 25-26/04/2024
- “Festa del lavoro” (“Labour Day”): 1/05/2024
- “Festa Nazionale della Repubblica” (“Republic Day”): 2/06/2024
- “Festa Giustiniana”: 14/06/2024
- “S. Antonio da Padova” (“Patron Saint day - Saint Anthony of Padua”): 13/06/2024
- Summer holidays: from 27/07/2024 to 25/08/2024

2 Secretary office hours

The Secretary of the PhD Course is held by Dr Susi Ceron and Dr Sara Pillan (phd@stat.unipd.it). The office, located in room 107, is open to PhD students daily, during mornings. The secretary office can be contacted for all administrative issues. In particular, you can contact the office for information regarding:

- pre-travel authorization;
- travel reimbursement;
- personal research budget;
- study visits abroad and information about the documentation for the corresponding 50% increase of the scholarship.

On the other hand, letters for:

- PhD student status;
- grant holding;

can only be issued by the Ufficio Dottorato e post lauream (phd@unipd.it).

3 Partner Departments and Academic Board

The doctoral program is managed by the Department of Statistical Sciences at the University of Padua in collaboration with two partner departments: the Department of Environmental Sciences, Computer Sciences, and Statistics at Ca' Foscari University of Venice, and the Department of Economics and Statistical Sciences at the University of Udine.

This management is facilitated through an [academic board](#) composed of a Faculty board and an Executive board, which also includes representatives of the doctoral students.

4 First year activities

First year is devoted to courses. Foundation courses are:

1. Functional Analysis
2. Probability Theory
3. Programming Methodologies for Data Analysis
4. Theory and Methods of Inference
5. Statistical Models.

Each foundation course is under the responsibility of one instructor, who may organise specialised units or course modules, lectured by experts. The Course also offers short, specialist, courses on topics such as: Applied multivariate techniques, Sampling theory, Bayesian data analysis and computation, Kalman filters and state space models. For schedules and detailed programmes see the web page of the Course, section Courses and Seminars. Students can also follow courses organized by other PhD Courses of the University of Padova or some upper division (master) courses (Laurea Magistrale) offered by the Department of Statistical Sciences and by other Departments at the University of Padova.

At the end of the first year, no later than 15 September, the Academic Board will evaluate PhD students for admission to the second year. Admission is conditional upon achievement of satisfactory level in first year activities.

One side objective of courses during the first year is to train students to team work, seminar presentations and paper preparation. Students are assumed to acquire within the first months a working knowledge of public domain environments such as Latex, for typesetting scientific papers, and R and Python, for data analysis and graphics.

During the first year, meetings with PhD students are organized in order to inform them about ongoing research at the Department of Statistical Sciences or at departments of other members of the Academic Board. The idea is to have informal meetings where researchers, or groups of researchers, illustrate current research topics and propose topics that might be of interest for the final thesis.

Each student in the first year is assigned a tutor, available to help and guide the student during the first year and in the choice of the research topic for the second and third year. Tutors are chosen by the Academic Board within the Department of Statistical Sciences.

Students are invited to constantly monitor the Course web page as it is the main mean to announce activities and exchange information (both related to teaching and to administrative issues).

5 Criteria for admission to second year

With reference to the five foundation courses (Functional Analysis, Probability Theory, Programming Methodologies for Data Analysis, Theory and Methods of Inference, Statistical Models) evaluation will be based on the following procedures and criteria.

The instructor of each course expresses a final evaluation for each student using the evaluation scale:

E (failed)
D (poor)
C (fair)
B (good)
A (excellent).

For each course, evaluation will be based on a final exam and possibly other activities. The exam is aimed at evaluating the level of knowledge of the course topics, as well as logical/critical and presentation skills. More details will be given by each course instructor at the beginning of the course. Typically, the exam will consist in some written exercises and/or an essay on a specialised topic to be presented in seminar form.

For each course, a deadline for exam completion is decided by the course instructor and the Course Coordinator. The precise exam date is fixed by each course instructor. Each exam can be taken only once by each student. The course instructor will inform each student as well as the Course Coordinator about the final evaluation in the course.

Admission to the second year will not be possible for a student having either one (or more) E (failed) or three (or more) D (poor). With one or two D evaluations, admission to second year is in doubt and will require a specific discussion within the Academic Board.

Students admitted to second year with one or two D marks will be subject to an evaluation of the research activities by the Academic Board after the first six months.

Within September 15 of the first year, students admitted to the second year propose to the Academic Board their own research programme, including a proposed supervisor, to be carried over during the second and third year. They can either join local research groups at Padova or start an independent research. Of course, students having positions devoted to a special research subject have to propose a research activity related to the subject.

6 Second and third year activities

Upon approval of the research programme, the Academic Board assigns a supervisor to each PhD student.

During the second and third year, up to 12 months can be spent at a university or other highly qualified institution abroad (study visit). In this case the grant is increased by 50%, for the whole period spent abroad. In addition, travel and living expenses can be supported by the student's personal budget (see Section 8). Of course, preliminary authorisation of the Academic Board is required.

Intermediate results are to be presented as a department seminar at the end of the second year, together with a detailed plan of research to be carried out during the third year. Admission to third year is decided by the Academic Board, on the basis of the results obtained during the second year, taking into account the evaluation by the supervisor.

The third year is especially devoted to writing the PhD thesis, which is expected to contain original research results.

The PhD programme has a standard duration of three years. Students can ask for an extension up to one year, specifying the reason for the request. Even when an extension is granted (see also Section 6), the scholarship is anyway limited to the first three years.

During the second or third year students are also expected to attend a course on Statistical Consulting, and can also be involved in the activities of the Consulting Center of the Department of Statistical Sciences.

Second- and third-year PhD students are entitled to do consulting and teaching activities within the limits stated by current regulations. **Preliminary authorisation by the student's su-**

pervisor and the Academic Board is, however, necessary. Such activities are not permitted during the first year. All unauthorized activities may be ground for exclusion from the PhD programme.

7 Final exam

To be admitted to the final exam, the **thesis has to be evaluated by two external highly qualified reviewers**. The thesis is passed on to the reviewers subject to **positive evaluation by the Academic Board**.

Discussion in front of the Academic Board usually takes place in a date communicated by the Course Coordinator with due anticipation. Ten days before the same date, students must submit to the Course Coordinator a preliminary draft (pdf file) of the thesis containing:

1. thesis front cover, composed according to Course Standard,
2. Index,
3. Chapter 1. Introduction. It has to contain two sections: Section 1.1 Overview and Section 1.2 Main Contributions of the Thesis,
4. at least one more chapter displaying original results,
5. Bibliography.

Subject to positive evaluation by the Academic Board, the student must send to the external reviewers:

1. the thesis,
2. the Academic Board evaluation,
3. a report about the Phd activities and possible publications.

Subject to positive evaluation by the external reviewers, the student is admitted to the final defence of the thesis in front of a thesis defence jury composed by Italian and foreign experts. The student is however granted the possibility to reformulate the thesis, in case the reviewers do not approve the submitted version of the thesis. In particular, in case a minor revision is required, the student has a month to amend the thesis. On the other hand, if at least one reviewer asks for a major revision, the student has six months to reformulate the thesis. However, any additional period is not covered by the scholarship.

The final version of the thesis, together with the required documents, has to be submitted within the deadline published on the University web page (see [here](#)), which contains detailed

information about the documentation required for the final exam. The thesis is typically written in English. According to the University rules, the thesis is to be in two-sided A4 format with at least 25 lines per page, each containing at least 60 characters.

The final exam in front of the thesis defence jury usually takes place at the beginning of the calendar year following the end of the third academic year. It typically consists of a presentation by the candidate (30-45 minutes), including a discussion on how the candidate replied to the comments, if any, by the external reviewers, followed by questions from the committee, on any topic related to the thesis work.

8 Travel and reimbursement policy

Each student is granted a budget of not less than 10% of the (annual) scholarship for each of the three years. This can be used to support the research activities, such as study visits in a University or other highly qualified institution abroad, or participation to conferences, workshops, schools. The budget can also be used to reimburse previously authorized activities during the first year, such as participation in summer schools, attendance to PhD courses organized by other universities or research associations or institutions, participation in conferences where the student presents a contribution. The budget can also be used for the purchase of hardware equipment, such as laptops or tablets (which remains to the Department at the end of the PhD). The research budget is not provided to extra quota students, i.e., students who have been admitted and are funded by national grants or by special programs (e.g., Marie Curie, Erasmus Mundus, CSC, Capes scholarships).

Research activities may be also supported by research allowances of supervisors and of research groups (note that travel grants from conference organizers, fellowship programs, and the home governments of international students are also sometimes external sources of support for academic travel). Therefore, PhD students are kindly encouraged to join departmental research groups, as well as groups at partner departments. Please, inform the Course Coordinator about your collaborations.

Requests for exceptions to any of these policies should be directed to the Course Coordinator by the supervisor.

In case of study visits, the following steps have to be taken to be entitled to reimbursement.

Before you travel.

Authorisation should be asked to the Course Coordinator by sending to the PhD Course Secretary a letter containing details on the visit (place, duration, contact person, etc.).

Complete the [Pre-Travel Authorization Form](#) and submit it, signed by the Course Coordinator or the funding responsible, to the PhD Course Secretary (please note that the

[Pre-Travel Authorization Form](#) is mandatory even if you do not ask for reimbursement). If you have already purchased transportation and lodging, use those amounts for the expense estimate. Otherwise, provide estimates based on market research. Final reimbursement will be based on actual expenses, but the estimate helps the Course with planning and budgeting. You may wish to retain copies for your records.

After you travel.

Turn in all relevant original receipts (including boarding cards) to the PhD Course Secretary.

9 Suspension

A temporary suspension of studies is applicable where a student ceases study with the University for an extended period of time. Students granted temporary suspensions of studies longer than 30 days are not eligible to be paid the grant during the suspension. The end of the PhD studies is delayed for as many days as the length of the suspension.

The temporary suspension can be applied for and approved on the basis of —bf genuine medical or personal reasons at the request of the student. Relevant evidence in support of the suspension and covering the period of suspension must be provided.

10 Facilities

Each PhD student has an office space at the Department. He/she will also be given a code to make photocopies and a magnetic card for access to the Department. Each student has a University of Padova e-mail address and a Department web page.

11 “Rights and duties” of PhD students

One of the missions of the PhD Course in Statistics is to provide doctoral students a high quality graduate education. High quality graduate education depends upon the professional and ethical conduct of the participants. Faculty and graduate students share complementary responsibilities in the maintenance of academic standards and the development of high quality graduate programs.

The PhD faculty, on its side, guarantees constant efforts to provide a high quality learning and research environment. PhD students of the Department of Statistical Sciences are expected to embrace and develop self-directedness and take primary responsibility and ownership for their

learning and development. This translates into a mature and professional conduct and a sincere commitment.

Duties of all doctoral students are:

- check daily the [online calendar](#);
- actively attend **all**
 - lectures;
 - oral presentations of PhD students;
 - department research seminars;
- justify in advance occasional absence from activities by sending an email to phd@stat.unipd.it (and to the teachers, if the absence is from a class);
- respect all deadlines;
- do not cheat or attempt to cheat during examinations or preparation of homeworks;
- do not submit a piece of work in which one presents as his/her own all or part of works produced by third parties (plagiarism);
- know and follow the [Course Regulations](#);
- check carefully the University of Padova Doctoral degrees [web page](#) for the various bureaucracies;
- register at [CINECA](#) through the web page, insert personal data, curriculum and publications and update the page regularly;
- use in a proper way the available resources: library, rooms, computers, printers, copying machines;
- use only the affiliation: Department of Statistical Sciences, University of Padova, Via C. Battisti 241, Padova, Italy;
- use only the University of Padova e-mail address.

12 Faculty contacts

Each faculty member has some contact hours that can be found on the personal web pages. PhD students are kindly invited to visit faculty members during the contact hours. If this is not possible, an e-mail appointment is desirable.