

COURSE : DOCTORAL THESIS IV
TRANSLATION : TESIS DE DOCTORADO IV

NUMBER : FIM8604

MODULES : DOES NOT APPLY

REOUISITES FIM8603 : CONECTOR AND : : RESTRICTIONS 030501 CHARACTER MINIMIM FORMAT THTORSHIP QUALIFICATION : STANDARD FORMATIVE LEVEL: DOCTORATE DISCIPLINE : PHYSICS

I. COURSE DESCRIPTION

The Thesis IV course of the Physics Doctorate program corresponds to a research project by the student under the supervision of one of the faculty members of the program. It is the first research course of a total of six where the student must initiate an investigation. The research topic to be developed can be chosen by mutual agreement between the student and the Thesis Advisor. The work to be developed must be original and can be theoretical or experimental. It is a mandatory requirement for student graduation to publish this work in an indexed journal.

II. LEARNING OUTCOMES

The objective of the course is to continue the investigation of an original topic by the student. The student must be able to develop their research according to the objectives and methodology set out in the Thesis Project, under the supervision of their Thesis Advisor.

III. CONTENT

Main and associated topics defined by the Thesis Advisor.

IV. METHODOLOGICAL STRATEGIES

Regular meetings between the student and the Thesis Advisor. Periodic reports on the progress of the student's work. Student presentations on the progress made. For both the presentation and the report, it is suggested to include the following sections:

- motivation;
- introduction and review of the state of the art;
- definition of the problem and hypothesis;
- · methodology;
- results;
- conclusions and impact.

V. EVALUATIVE STRATEGIES

The evaluation of the thesis work is made from the results presented in the partial reports prepared by the student and the oral presentations made. The percentage of weighting of these instances is at the discretion of the Thesis Advisor.

PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE FACULTY OF PHYSICS / DECEMBER 2020



VI. BIBLIOGRAPHY

REQUIRED

- $\bullet\,$ To be determined by Thesis Advisor
- Manual de Autoinstrucción: Seguridad en Laboratorios, Comité Institucional de Seguridad en Investigación, Pontificia Universidad Católica de Chile.

OPTIONAL

- The Scientist's Guide to Writing, Heard, S.
- Responsible Conduct of research, Shamoo, A.E. and Resnik, D.B. New York, USA. Oxford University Press. 2003.