CURSO	:	TESIS DE DOCTORADO I
TRADUCCIÓN	:	DOCTORAL THESIS I
SIGLA	:	FIM8601
CRÉDITOS	:	20 UC / 12 SCT
MÓDULOS	:	No aplica
REQUISITOS	:	FIM8201
CONECTOR	:	Υ
RESTRICCIONES	:	Alumno de Doctorado en Física (Currículo 030501)
CARÁCTER	:	Mínimo
TIPO	:	Tutoría
CALIFICACIÓN	:	estándar (calificación de 1.0 a 7.0)
PROFESOR	:	Académicos de la UA 02 o 03
DISCIPLINA	:	Física

### I. DESCRIPTION

The Thesis I 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 investigation 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 guide teacher. 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. GOALS

The objective of the course is to initiate the student in the investigation of an original topic. The student must be able to: pose a scientific question to be solved and a hypothesis; carry out a bibliographic review that establishes the context of the research and presents the results of other studies related to the scientific question; establish the methodology that will be used to solve the scientific question. Prepare a document that contains the results of the formulation process of the research project described above, to be evaluated before the Thesis Committee in the course FIM8202 "Thesis Project".

#### **III. CONTENT**

Main and associated topics defined by the guide teacher.

#### IV. METHODOLOGY

Regular meetings between the student and the guide teacher. 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 search of the state of the art;
- definition of the problem and hypothesis;

- methodology;
- partial results;
- conclusions and future work.

# V. EVALUATION

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 guide teacher.

## VI. BIBLIOGRAPHY

# Required

• To be determined by the guide teacher.

• Self-Instruction Manual: Laboratory Safety, Institutional Research Safety Committee, 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.