



INSTITUTO DE FÍSICA
FACULTAD DE FÍSICA

COURSE	: MASTER THESIS I
TRANSLATION	: TESIS DE MAGISTER I
NUMBER	: FMD3021
CREDITS	: 20 UC / 12 SCT
MODULES	: 2
RESTRICTIONS	: 030401, 030501, 030801, 030802, 030803
CHARACTER	: MINIMUM (FOR CURRICULUM 030801, 030802, 030803)
FORMAT	: THESIS
QUALIFICATION	: STANDARD
FORMATIVE LEVEL	: MAGISTER
DISCIPLINE	: MEDICAL PHYSICS

I. COURSE DESCRIPTION

In this course, students develop investigative skills related to the formulation of a scientific question for which a review of the state of the art is carried out and a methodology is established to answer said question. The choice of research topic and associated work is carried out under the guidance of a guide teacher.

II. LEARNING OUTCOMES

- Ask a scientific question and a hypothesis to be solved;
- Carry out a bibliographic review that establishes the context of the research and presents the results of other studies related to the scientific question;
- Know the ethical considerations associated with scientific research, particularly in the medical field;
- Establish the methodology that will be used to solve the scientific question.

III. CONTENT

- Formulation of a scientific question and hypothesis.
- Formulation of study objectives.
- Proposal of a methodology consistent with the scientific question.
- Aspects of writing and presenting a research project.
- Ethical aspects involved in research proposals.

IV. METHODOLOGICAL STRATEGIES

- Regular meetings between the student and the guide teacher.
- Periodic reports.
- Student presentations

V. EVALUATIVE STRATEGIES

- Written report and oral presentation on the research project (100%)



INSTITUTO DE FÍSICA
FACULTAD DE FÍSICA

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.