



INSTITUTO DE FÍSICA
FACULTAD DE FÍSICA

COURSE	:	QUALIFYING EXAMINATION
TRANSLATION	:	EXAMEN DE CALIFICACIÓN
NUMBER	:	FIM8201
CREDITS	:	0 UC / 0 SCT
MODULES	:	DOES NOT APPLY
REQUISITES	:	NO REQUIREMENTS
RESTRICTIONS	:	030501
CHARACTER	:	MINIMUM
FORMAT	:	EXAM
QUALIFICATION	:	ALPHANUMERIC
FORMATIVE LEVEL	:	DOCTORATE
DISCIPLINE	:	PHYSICS

I. COURSE DESCRIPTION

The qualification exam consists of four written questions in which the contents described in point III are evaluated and constitutes one of the requirements to qualify for the degree of Doctor of Physics awarded by the Pontificia Universidad Católica de Chile. It is given the first week of August of each year.

II. LEARNING OUTCOMES

The objective of the exam is to measure the candidate's knowledge and skills in the subjects indicated in point III, which are necessary to carry out an independent research work and lead to the thesis work during the doctoral program.

III. CONTENT

The exam measures knowledge and skills in the following four subjects:

- Electricity and magnetism
- Classical Mechanics
- Statistical Mechanics
- Quantum mechanics

The contents evaluated are those covered in the following courses of the Bachelor of Physics program:

- FIZ0321 Electromagnetic Theory
- FIZ0222 Classical Mechanics II
- FIZ0411 Statistical Mechanics
- FIZ0322 Quantum Physics I
- FIZ0412 Quantum Physics II

IV. METHODOLOGICAL STRATEGIES

A group of four Professors from the Physics Institute, selected by the Postgraduate Committee, are responsible for preparing the Qualification Exam, applying it and evaluating it. The Qualification Exam is made up of four questions that are given in the same week, a daily test on Monday, Tuesday, Thursday and Friday. Wednesday is free for students. Students have 3 hours to solve each of the questions. The results are delivered between 1 and 2 weeks after taking the Qualification Exam.

V. EVALUATIVE STRATEGIES

The student is Pass or Fail in the qualifying exam. In the event that the student fails the exam, they will only have a second chance to take it the following year.



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VI. BIBLIOGRAPHY

REQUIRED

The suggested bibliography corresponds to that indicated in the programs of the subjects listed in point III. In addition to this, students have a copy of the qualifying exams with their solutions from the last 10 years.

OPTIONAL

N/A