

Course Title	Course Code	Number of Study Hours				Year	Level	Prerequisites
		Theo.	Lab.	Credit	ECTS			
Thesis	PHYS699	6	-	6	30	2nd	4th	-

Student's workload				
In-class activities	Contact Hours		Self-learning/study	Hours
Lectures	90		Preparation for classes	67
Laboratory	-		Case studies	562
Exams and quizzes	5		Working on lab experiment	-
Lab demo	-		HW/Assignments	-
			Study for exam	105
Total	95		Total	734
Total Learning Hours = 829			Equivalent ECTS points = Total LH/28 = 30	

#### BRIEF COURSE DESCRIPTION

- Thesis is a compulsory requirement for the master's degree in physics. It is designed to get the students prepared to work in certain important physics fields and practice all the research steps to come up with unique and systematic outcomes of research results and hence write a comprehensive thesis to report all findings in a well-structured arrangement to represent a reference to other researchers in the field. The student will also get practiced the competencies of writing, preparing presentations, defending their own results and finding scientific justification.

## COURSE OBJECTIVES

**The main objectives of Thesis are focused to:**

1. Analyze previous studies in the literature using justified gap analysis.
2. Apply methodologies.
3. Follow the research line from beginning to end (results).
4. Write the thesis.
5. Present and defend the results (thesis).
6. Produce some contributions in the fields of physics and science.

## COURSE CONTENTS

1. Introduction and orientation to the course and course outline
  2. Research ethics
  3. How to define your research problem
  4. Academic legal writing and annotated bibliography
  5. Research Proposal
  6. Background
  7. Literature Review
  8. Theoretical Framework
  9. Methodology and Analysis Conclusions
  10. Presentation of research proposals
  11. The research process
- Thesis presentation

## ASSESSMENT CRITERIA

- Class participation: 15%
- Research proposal: 15%
- Presentation of research proposal: 15 %
- Thesis presentation: 5 %
- Thesis defense: 50%

## COURSE TEACHING STRATEGIES

- Discovery learning, expository learning, demonstration, case study, guided discussion, orientation sessions, problem-based learning, interactive discussion,