

Study program	Level of studies		Third cycle	
	Title of the study program		Doctoral studies in physics	
Course title	APPLICATIONS OF RADITION AND NUCLEAR PHYSICS			
Course ID	Semester	Course status	ECTS credits	Teaching hours
PAP7081	I /II	Elective	10	30
Course aims and expected learning outcomes	This course is designed to provide an understanding of the applications of radiation and nuclear physics in various fields, including medicine, industry, and research. The course covers the basic principles of radiation physics, radiation detection and measurement, and the various applications of radiation in various fields.			
COURSE CONTENT				
Lecture 1: Radiation and Nuclear Physics Lecture 2: Radioactive Decay and Radiation Interactions Lecture 3: Radiation Detection and Measurement Lecture 4: Radiation Protection and Safety Lecture 5: Industrial Applications of Radiation Lecture 6: Nuclear and Radiation Medicine Lecture 7: Activation Analysis Lecture 8: Food as food stuvs treatment Lecture 9: Material modifications Lecture 10: Safety and security Lecture 11: Nuclear Power Generation Lecture 12: Radiation in Space and Satelites Lecture 13: Other topics				
LITERATURE			ASSESSMENT OF LEARNING	
1. Various published papers and reviews updated every year.			Assessment Method	Points
			Practice/Project	20
			Seminar paper	30
			Presentation	50
			Total	100
Remarks				