

Study program	Level of studies		Second cycle	
	Study program name		Physics Education	
Course name	ADVANCED PHYSICS LABORATORY I			
Course ID	Semester	Course status	ECTS credits	L+E
PCM7311	I	MANDATORY	3	0+3
Lecturer				
Aims and intended learning outcomes	<p>Aim of the course is the expansion of knowledge and concepts in modern physics and qualification of students for independent organization and execution of laboratory exercises under supervision.</p> <p>After successful completion of the course, students will be able to demonstrate and explain certain modern physics experiments, use a computer to interpret results, draw graphs and perform a statistical analysis of data.</p>			
Course content				
Study of crystal structures. The Franck-Hertz experiment. Thermionic emission. Certain physical properties of semiconductors. Thermoelectric phenomena in semiconductors. Nuclear magnetic resonance.				
Student workload (hours)			Grading	
Lectures and Exercises	45	Assessment method	Points	
Exam preparation	15	Homework	30	
Assignments	10	Midterm exam	30	
Consultation	5	Final exam	40	
Total	75	Total	100	
Literature				
<ol style="list-style-type: none"> 1. Uputstva za vježbe iz Višeg fizikalnog praktikuma I, nerecenzirana interna skripta 2. Ch. Kittel: Uvod u fiziku čvrstog stanja, Savremena administracija, Beograd, 1970. 				
Remarks				