

Program	Level of studies		Second cycle	
	Program name		Physics	
Course name	DEFECTS IN SOLIDS			
Course ID	Semester	Course status	ECTS credits	L+E
	I	ELECTIVE	6	2+0
Lecturer	Doc.dr. Maja Đekić			
Aims and intended learning outcomes	<p>Course objective is to familiarize students with defects in solids.  Learning outcomes:</p> <ol style="list-style-type: none"> <li>1. Is familiar with different defects in solids</li> <li>2. Is familiar with formation of defects in solids</li> <li>3. Is familiar with the influence of defects on the properties of materials.</li> </ol>			
Course content				
Classification of defects. Lattice distortion and relaxation. Effective mass theory. Simple theory of deep levels in semiconductors. Vibrational properties and entropy. Thermodynamics of defects. Defect migration and diffusion.				
Student workload (hours)		Grading		
Lectures and Exercises	30	Assessment method	Points	
Exam preparation	50	Test	40	
Assignments	50	Paper	40	
Other	20	Final Exam	20	
Total	150			
		Total	100	
Literature				
<ol style="list-style-type: none"> <li>1. J. Bourgoin M. Lannoo, Point Defects in Semiconductors, Springer-Verlag, 1983.</li> <li>2. J. Friedel, Dislocations, Addison-Wesley</li> </ol>				