

Study program	Level of studies		Second cycle	
	Study program name		Physics Education	
Name of the course	FIBER OPTICS			
Course ID	Semester	Course status	ECTS credits	L+E
PAP9671	I or II	ELECTIVE	6	2+1
Lecturer				
Aims and intended learning outcomes	The objective of the course is to get students acquainted with optical fibers and their application.			
Course content				
Description of the process of light traveling through optical fiber: wave and geometric optics. Application of optical fibers in the transmission of information: at short and long distances. Glass fiber based sensors. Glass fiber based interferometers. Application of optical fibers in medicine and biology.				
Student workload (hours)			Grading	
Lectures and Exercises	45	Assessment method	Points	
Exam preparation	50	Partial exam	40	
Assignments	40	Practical work	20	
Other	15	Student activity	10	
Total	150	Final exam	30	
		Total	100	
Literature				
<ol style="list-style-type: none"> 1. D. Milatović: Optoelektronika, Svjetlost, Sarajevo 1989 2. Keiser, Gerd. <i>Optical fiber communications</i>. John Wiley & Sons, Inc., 2003. 3. Keiser, Gerd. <i>Biophotonics: Concepts to Applications</i>. Springer, 2016. 				
Remarks				