

NAME OF THE COURSE		Physics				
Code	PMPN01	Year of study	2			
Course teacher	izv. prof. dr. sc. Željana Bonačić Lošić	Credits (ECTS)	6			
Associate teachers		Type of instruction (number of hours)	L	S	E	F
			30	15	30	
Status of the course	Elective	Percentage of application of e-learning	10			
COURSE DESCRIPTION						
Course objectives	Enable the acquisition of knowledge and develop competencies in general physics that are important and useful for further study and use in the profession.					
Course enrolment requirements and entry competences required for the course						
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	<p>Define and apply basic concepts in the field of general physics. Explain and apply basic physical laws. Apply the acquired knowledge of basic physical concepts from general physics to solving simple problems and tasks.</p> <p>Experimentally test some basic physical laws from the field of general physics.</p> <p>Apply the acquired knowledge in the profession. Prepare and independently present a seminar paper.</p>					
Course content broken down in detail by weekly class schedule (syllabus)	<p>Introduction. Physical properties and SI units. Mechanics Kinematics. Dynamics. Vibration and waves. Statics and dynamics of fluids. Elasticity. Heat Thermal expansion of the body. Calorimetry. Gas laws. Kinetic theory of gases. Thermodynamics. Electromagnetism Electrostatics and dielectric properties of matter. Electric currents. Electromagnetism and magnetic properties of matter. Optics Geometric optics. Physical optics. Photometry. Modern physics Explanation of atomic spectra. Spectral analysis. Colorimetry. Laboratory exercises. Introductory lecture on measurements and processing of results. Mass measurement. Determination of fluid density. Young's modulus of elasticity. Fluid surface tension. Thermal expansion of solids bodies. Checking gas laws. Ohm's law and resistance measurement. Optical lenses. Optical diffractions. Spectral analysis.</p>					
Format of instruction	Theoretical part of the lecture with interactive simulations and demonstration experiments and solving tasks with the guidance of assistants and homework. Performance laboratory exercises and seminar work.					

Student responsibilities	Students should actively participate and follow the lectures and exercises					
Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Class attendance		Research		Practical training	
	Experimental work		Report		Homework assignments	
	Essay		Seminar essay	1	(Other)	
	Tests		Oral exam	2.5	(Other)	
	Written exam	2.5	Project		(Other)	
Grading and evaluating student work in class and at the final exam	Colloquia, seminar and final written and oral exam. Final grade: 40% written, 40% oral and 20% seminar. Students can pass the written and oral part of the exam through several colloquia during the semester.					
Required literature (available in the library and via other media)	Title				Number of copies in the library	Availability via other media
	Food Physics: Physical Properties-Measurements and Applications, L. O. Figura, A. A. Teixeira, Springer, 2007.					
Optional literature (at the time of submission of study programme proposal)	Physical Properties of Foods, S. Suhin, S. G. Sumu, Springer, 2006.					
Quality assurance methods that ensure the acquisition of exit competences	Exam results statistics and student evaluation through an anonymous survey at the end of the course. The survey is conducted according to the regulations of the University of Split.					
Other (as the proposer wishes to add)						