NAME OF THE COURSE	Introduction to Astronomy and Astrophysics					
Code	PMP130	Year of study	GU-1 GU-2 UGU-3			
Course teacher	Marko Kovač, PhD, Assistant Professor	Credits (ECTS)	4,0			
Associate teachers		Type of instruction (number of hours)	L	S	E	F
			30	15		
Status of the course	Elective	Percentage of application of e-learning	20			

COURSE DESCRIPTION		
Course objectives	Introduce students to the basic concepts and laws of astronomy and astrophysics, which can enable them to further independent learning in astronomy and astrophysics.	
Course enrolment requirements and entry competences required for the course	Acquired learning outcomes of the course General Physics I.	
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After mastering the material, the student is expected to know: 1. The most important from the history of astronomy. 2. Orient oneself on the celestial sphere. 3. Explain the movement of the Earth and phenomena in the celestial sphere. 4. Explain the structure and processes of formation and development of celestial bodies. 5. Describe the evolution of stars and explain the Hertzsprung-Russell diagram. 6. Explain thermonuclear processes in stars and energy radiation. 7. Describe distance measurement methods. 8. Interpret the basic features of the Big Bang theory. 9. Explain the basics of telescope operation.	
Course content broken down in detail by weekly class schedule (syllabus)	1. History of astronomy. 2. The movement of the Earth and phenomena on the celestial sphere. 3. Gravity and celestial mechanics. 4. The solar system. 5. Telescopes. 6. Basic properties of stars. 7. Spectral classification of stars. 8. Hertzsprung- Russell (HR) diagram. 9. Origin and development of stars. 10. Interstellar matter. 11. The Milky Way. 12. Distance measurement methods. 13. Galaxies and cosmology.	
Format of instruction	☒ lectures ☒ seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning ☒ field work	☐ independent assignments ☒ multimedia ☐ laboratory ☐ work with mentor ☐ homework assignments
Student responsibilities	Attend at least 70% of lectures. Present seminar work.	

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<tr><td>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)</td><td>
<table>
<tr><th>Name</th><th>Ects</th><th>Name</th><th>Ects</th><th>Name</th><th>Ects</th></tr>
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<tr><td>Grading and evaluating student work in class and at the final exam</td><td>Pass two midterm exams with a minimum score of 50% at each midterm or pass the final exam with a minimum score of 50%. Midterm exams and final exam consist of both oral and written parts.</td></tr>
<tr><td>Required literature (available in the library and via other media)</td><td>
<table>
<tr><th>Title</th><th>Number of copies in the library</th><th>Availability via other media</th></tr>
<tr><td>VUJNOVIĆ, V. (1990). Astronomija 1 : osnove astronomije i planetski sustav. Zagreb: Školska knjiga.</td><td>3</td><td></td></tr>
<tr><td>VUJNOVIĆ, V. (1994). Astronomija 2 : metode astrofizike, sunce, zvijezde i galaktike. Zagreb: Školska knjiga.</td><td>1</td><td></td></tr>
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<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td>CARROLL, B. W. (UK :). An introduction to modern astrophysics. Cambridge, UK: Cambridge University Press.</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td>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.</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td></td></tr>
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