NAME OF THE COURSE	Meteorology				
Code	PMP161	Year of study	1		
Course teacher	Jadranka Šepić, PhD, Assistant Professor	Credits (ECTS)	5		
Associate teachers		Type of instruction (number of hours)	L	S	E	F
			35	0	15	0
Status of the course	Elective	Percentage of application of e-learning				

COURSE DESCRIPTION	
Course objectives	- provide knowledge of basic variables and processes in the atmosphere - provide knowledge on atmospheric thermodynamic processes - provide knowledge on equations describing dynamics and states of the atmosphere
Course enrolment requirements and entry competences required for the course	- basics of physics - basics of mathematics - basics of fluid mechanics - basic programming
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	It is expected that students will gain basic knowledge on: - atmospheric composition and structure - relevant variables and processes in the atmosphere - thermodynamic of dry and moist air - atmospheric stability - cloud formation and precipitation - fundamental forces acting in the atmosphere - basic equations
Course content broken down in detail by weekly class schedule (syllabus)	1. Atmospheric composition and atmospheric basics (2 hours of lectures) 2. Ais pressure; hydrostatic equilibrium (2 hours of lectures) 3. Solar radiation and heat fluxes (2 hours of lectures) 4. Thermodynamics of unsaturated air (2 hours of lectures) 5. Moisture variables (2 hours of lectures) 6. Thermodynamics of saturated air (2 hours of lectures) 7. Atmospheric stability (2 hours of lectures) 8. Clouds and precipitation (4 hours of lectures) 9. Fundamental forces (2 hours of lectures) 10. Non-inertial reference frame and apparent forces; component equations in spherical coordinates (4 hours of lectures) 11. Scaling analysis. Geostrophic balance and geostrophic wind (2 hours of lectures) 12. Component equations in other coordinates (2 hours of lectures)
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
Student responsibilities	Attend at least 70% of lectures and 70% of exercises.

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of*						
	Class attendance	1	Research		Practical training	
	Experimental work		Report		Homework	1
	Essay		Seminar essay		(Other)	

<table>
<tr><td rowspan="2">ECTS credits is equal to the ECTS value of the course)</td><td>Tests</td><td></td><td>Oral exam</td><td>1.5</td><td>(Other)</td><td></td></tr>
<tr><td>Written exam</td><td>1.5</td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="6">Twice during the semester students take preliminary exams (the first preliminary exam consists of the first eight lessons; and the second one of the last four lessons). Students who acquire more than 50% at preliminary exams are exempt from the written exam. Students receive and submit homework during the course. The final grade is formed based on the written exam (or preliminary exams) (40%), homework (20%) and oral exam (40%).</td></tr>
<tr><td rowspan="2">Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td colspan="2">Availability via other media</td></tr>
<tr><td colspan="3">James R. Holton & Gregory J. Hakim
An Introduction to Dynamic Meteorology
Academic Press, 2013.</td><td>2</td><td colspan="2">no</td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">Roland B. Stull
An Introduction to Boundary Layer Meteorology
Kluwer, 1988.</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">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 colspan="6"></td></tr>
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