

Study program		Study cycle		I study cycle	
		Orientation		Geography in Education	
SUBJECT					
Subject name		Meteorology			
Subject code	Semester	Subject status	ECTS credits	Contact hours	
FG-101-1	I	Mandatory	5	125	
Prerequisites					
Assigned professors and assistants	Subject Leader		Dr.sci. Nusret Drešković, full professor		
	Teaching Assistants		Ahmed Džaferagić, MA, teaching assistant		
Subject objectives	<p>The main objectives are:</p> <p>Introducing and acquiring knowledge about the theoretical basis of quantitative-qualitative indicators of spatial-temporal dynamics of major meteorological elements and meteorological phenomena;</p> <p>Introducing and acquiring knowledge about the basic modifiers of meteorological elements and weather phenomena;</p> <p>Introducing and acquiring knowledge about weather and meteorological synoptic forecasting models;</p> <p>Introducing and acquiring knowledge about meteorological instrumental monitoring, type and work mode of meteorological instruments, observation terms and climatological statistical methods of instrument monitoring data processing;</p> <p>Introducing and acquiring knowledge about the possibilities of the evaluation of meteorological elements for the purpose of their use in educational process in primary and secondary schools.</p>				
SUBJECT CONTENT					
Ordinal	Teaching units	Contact hours			
		L	P	S	C
1.	Atmosphere - general concepts and origin. The composition and density of the atmosphere. The vertical structure of the atmosphere.	2			
2.	Meteorology - definition, objectives, tasks, object of study and classification. Meteorological elements and meteorological phenomena. Meteorological weather - concepts, definitions and types. Meteorological observations and measurements - term, importance and types of meteorological measurements. Types of meteorological instruments. Organization of meteorological services. Surveillance periods. Statistical methods of meteorological data processing.	2	4		
3.	Energetic of atmospheric processes. Solar radiation. Forms of Solar radiation. Daily and annual flows of global Solar radiation. Geographical distribution of Solar radiation. Earth's radiation and atmospheric anti-radiation. The balance of radiation. Instruments for measuring and processing data on solar radiation and light. The importance of Solar radiation.	3	3	1	1
4.	Heat in the soil, water and atmosphere. Heating and cooling of the soil. Daily and annual flows of soil temperature.	2	2	1	1
5.	Heating and cooling of the water. Daily and annual flows of water temperature. Instruments for measuring and soil and water temperature data processing. The importance of soil and water temperature.	2	2	1	
6.	Heating and cooling of the air. Daily and annual flows of air temperature. Geographical distribution of air temperature. Vertical changes of the air temperature. Instruments for measuring and air temperature data processing. The importance of air temperature.	2	2	1	1
7.	Test	2			
8.	The water in the atmosphere. Evaporation. Geographical distribution of the evaporation. Instruments for measuring and evaporation data processing. The importance of evaporation.	2	2	1	
9.	Humidity and humidity measurement sizes. Daily and annual flows of humidity. Geographical distribution of relative humidit. Instruments for measuring and processing of data on humidity. The importance of humidity.	2	2	2	1

10.	Horizontal visibility and fog. Types of fog. Geographical distribution of fogs. Instruments for measuring and processing of horizontal visibility data. The significance of the fog.	2	2	1	1
11.	Cloudiness. The origins and types of clouds. Geographical distribution of cloudiness. Instruments for measuring and cloudiness data processing. Significance of the cloudiness.	2	2	1	1
12.	Precipitation. The origins and types of precipitation. Daily and annual flows of precipitation. The geographical distribution of precipitation. Instruments for measuring and processing of data on the amount of precipitation. The importance of precipitation .	2	4	2	1
13.	The dynamics of atmospheric processes. Atmospheric (air) pressure. Daily and annual flows of air pressure. Geographical distribution of air pressure. Instruments for measuring and air pressure data processing. Significance of air pressure.	2	2	1	1
14.	Synoptic. Synoptical maps of absolute and relative topography. Modern synoptical methods and models for weather forecasting.	2	2	2	1
15.	Wind. The mechanical properties of the wind. Types of air circulation and types of winds. Geographical distribution of winds. Instruments for measuring and wind data processing. The importance of wind.	2	2	1	1

STUDENT WORKLOAD (hours)

Contact Hours (L+P)	60	Practical work	10	Seminars	15	Exam study time	15
Literature – reading	15	Written papers		Consultation	10	TOTAL	125

LITERATURE		EVALUATION OF KNOWLEDGE AND CRITERIA			
<p>MANDATORY:</p> <ul style="list-style-type: none"> • Šegota, T. Filipčić, A. (1996): Klimatologija za geografe, Školska knjiga, Zagreb. • Milosavljević, M. (1988): Praktikum iz klimatologije sa meteorologijom, Xxxxx, Xxxxxx <p>ADDITONAL:</p> <ul style="list-style-type: none"> • Milosavljević, M. (1988): Meteorologija, Naučna knjiga, Beograd. • Milosavljević, M. (1988): Klimatologija, Naučna knjiga, Beograd • Penzar, I., Penzar, B. (1985): Agroklimatologija, Školska knjiga, Zagreb. • Dukić, D. (1981): Klimatologija, Naučna knjiga, Beograd • Ducić. V., Anđelković, G. (2004): Klimatologija – Praktikum za geografe, Geografski fakultet Univerziteta u Beogradu, Beograd. 	Parameters	Maximum points	Minimum points		
	1.	Attendance	5	3	
	2.	Participation on lectures	5	3	
	3.	Midterm exam	40	22	
	4.	Seminar	10	6	
	5.	Final exam	40	21	
	Total		100	55	
Notes:					