Study program	Study cycle	I study cycle
	Orientation	Regional and spatial planning

SUBJECT

Subject name	**Climatology**			
Subject code	Semester	Subject status	ECTS credits	Contact hours
FG-102.5-2	II	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	The main objectives are: Introducing and acquiring knowledge about dynamic processes in the atmosphere, baric and circulating systems and weather conditions; Introducing and acquiring knowledge with the fundamentals of climate classification; Introducing and acquiring knowledge about the most important climatic classifications and climatic types; Introducing and acquiring knowledge about the theoretical foundations of quantitative-qualitative indicators of spatial-temporal dynamics of major climate types in Koppen climate classification; Introducing and acquiring knowledge about the climatic characteristics, climate types and climatic regionalization of Bosnia and Herzegovina; Introducing and acquiring knowledge about climatic characteristics of cities and the impact of climate change on wildlife and humans; Introducing and acquiring knowledge about the application of climate and climatic regionalization of the World in regional and spatial planning;			

SUBJECT CONTENT

Ordinal	Teaching units	Contact hours			
		L	P	S	C
1.	Air masses and air fronts. Types of air masses. Types of air fronts.	2	2		
2.	Baric systems. Cyclones - creation and development. Types of cyclones. Anticyclone - creation and development. Types of anticyclones.	2	2		
3.	Monsoons circulation. Geographical distribution of the monsoons. Meterological disasters - types and effects. Geographical distribution of meterological disasters.	2	2		
4.	Climatology - concept, objectives, tasks, object of study and classification. Climate elements and climate modifiers. Earth's climate - general terms, definition and importance. Classification of climate. Solar and physical climate.	2	2		
5.	Climates - definitions and classifications. The principles of climate classification. Climate indexes. Climate classification according to E.De Marton. Geographical distribution of climate types and climatic variations according to E.De Marton.	2	2	2	2
6.	Climate classification according to B.P.Alisov. Geographical distribution of climate types according to B.P.Alisov. Climate classification according to C.W. Thornthwaite. Geographical distribution of climate types according to C.W.Thornthwaite. Climate classification for technology purposes.	2	2	3	2
7.	Test	2			
8.	Climate classification according to W.Köppen - basics of classification, climate indexes and division. Main climate classes. Main climate types and climate subtypes. The tropical rainforest climate. Geographical distribution of tropical rainforest climate.	2	2	2	2
9.	Arid climate. Geographical distribution of arid climate. Moderately warm and rainy climate. Geographical distribution of moderately warm and rainy climate. Snowy-forests climate. Geographical distribution of snowy-forests climate. Snowy-forests climate. Geographical distribution of snowy-forests climate.	2	2	2	1
10.	European climate according to W.Köppen climate classification. Geographical distribution of major climate elements in Europe. Geographical distribution of climate classes, the main types of climate in Europe. Climate of non-European continents according to W.Köppen climate classification.	2	4	2	1

11.	Geographical distribution of major climate elements of the non-European continents. Geographical distribution of climate classes, the main types of climate of the non-European continents.	2	4	2	1
12.	Bosnia and Herzegovinas climate according to W.Köppenovoj climate classification.Geographical distribution of major climate elements in Bosnia and Herzegovina. Geographical distribution of climate classes, the main types of climate and climate subtypes in Bosnia and Herzegovina.	2	2	2	1
13.	Fluctuations and climate variations. Climate and climate change in the instrumental period. Climate and climate change in the Holocene. Climate and climate change in the geological history of the Earth. Theories of climate fluctuation and climate cycles.	2	2		
14.	Spatial differentiation of the climate. Climate of the cities and the environment. The influence of climate on the living world. Humans and climate.	2	2		
15.	Climate impact on the biosphere. Climate and mankind.	2	2		

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

MANDATORY:

- Šegota, T. Filipčić, A. (1996): Klimatologija za geografe, Školska knjiga, Zagreb.
- Milosavljević, M. (1988): Praktikum iz klimatologije sa meteorologijom.

ADDITIONAL:

- 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.

EVALUATION OF KNOWLEDGE AND CRITERIA

	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: