Level: master

Course title: Master of Geographer

Subject title: Applied Climatology; dr Stevan Savić

Status: elective

ECTS: 6

Requirements: n/a

Learning objectives

Students will get information about posibilities of using energy of various meteorological parameters and climatological processes in the atmosphere and above the ground (solar energy, energy of wind, patterns of rainfall and snow melting as essential factors of hydropower potential). Master students will be informed about current technologies for using various sources of enerty from atmosphere precesses. At the same time, students will know positive and negative impacts of various climatology events on economies and societies.

Learning outcomes

Students will get knowledge how to use energy sources from climatology or meteorology parameters or processes. Are these sources profitable enough and general advantages or disadvantages of using these sources. Students will know posibilities of adaptation on eventally negative climate processes which can effect on society and economy. Contrary to this, students will know opportunities to use the climatology processes in order to provide better quality of life and better environment protection.

Syllabus

Theoretical instruction

Solar energy – global examples and current situation in Serbia

Wind energy – examples of using this power in the World and possibilities of using wind energy in Serbia

Hydropower – connection of rainfall patterns and seasonality of snow and ice melting with hydropower (global examples and situation in Serbia)

Climate events – flood waves as consequences of rainfall patterns and snow melting; heat waves; extreme weather events, forest fires, drought (global examples and situation in Serbia)

Methods of adaptation on extremes (global examples and situation in Serbia)

Importance and application of climate in tourism industry (global examples and situation in Serbia)

Practical instruction

Using the instruments which have been used in monitoring various meteorological parameters (automatic weather stations, different analogue and digital instruments)

Visit Meteorological laboratory in Petrovaradin

Weekly teaching load				Other:
Lectures: 2	Exercises: 2	Other forms of teaching:	Student research:	