Name of the subject: Climate change and hydrological hazards

Teacher(s): Dragoslav Pavić, Stevan Savić

Status of the subject: elective

Number of ECTS points: 15

Condition: -

Goal of the subject

The main goal is to understand the connection between global climate changes and main water management issues in Serbia, the region and globally.

Outcome of the subject

Students will be competent for complex and comprehensive analysis of water management issues on Earth caused by intensive global climate changes. Furthermore, student will get knowledge related to the importance of mitigation global climate changes, as well as the significance of sustainable water management in everyday life and society.

Content of the subject

Theoretical lectures: Global climate changes – theory, causes and consequences; Water management – concept and division; Using and management of water and water gang; Protection of water sources; Global climate changes and water supply; Global climate changes and irrigation of arid areas; Global climate changes and flood protection; Global climate changes and hydropower; Global climate changes and navigation; Global climate changes and erosion and torrents.

Practical lectures: Preparation of the scientific project. Field work.

Recommended literature

- 1. Kernan, M., Battarbee, R.W., Moss, B.R. (2010): Climate change impacts on freshwater ecosystems. Wiley-Backwell, 328 pp.
- 2. McIlveen, R. (2010): Fundamentals of weather and climate. OUP Oxford, 632 pp.
- 3. Shelton, M.L. (2009): Hydroclimatology Perspectives and Applications. Cambridge University Press, 438 pp.
- 4. van Dam, J.C. (2003): Impacts of Climate Change and Climate Variability on Hydrological Regimes (International Hydrology)(International Hydrology Series). Cambridge University Press, 160 pp.
- 5. Walter Leal Filho (Ed.) (2012): Climate Change and the Sustainable Use of Water Resources. Springer: 823 pp.
- Brekke, L.D., Kiang J.E., Olsen, J.R., Pulwarty, R.S., Raff, D.A., Turnipseed, D.Ph., Webb, R.S., White, K.D. (2009): Climate Change and Water Resources Management: A Federal Perspective. U.S. Geological Survey: 65 pp.
- 7. Dukić, D., Gavrilović, Lj. (2005): Vodoprivreda. U: Hidrologija, Univerzitet u Beogradu, Naučna knjiga, Beograd: 323-371.

Number of active classes	Theory: 5(75)	Practice: 5(75)
Methods of delivering lectures		
Oral lectures, individual consultations, seminar papers, field work		
Evaluation of knowledge (maximum number of points 100)		
Project presentation: 50 points		
Oral exam: 50 points		