Study Programme: PhD in Geosciences (Geography)

Level: PhD

Course title: Natural disasters and geography

Lecturer(s): dr Milivoj Gavrilov, dr Dragoslav Pavić

Status: elective

ECTS: 11

Requirements: None

Learning objectives

To acquire basic knowledge of the concept of natural catastrophes, causes, widespread, damages/benefits, recovery, protection and predictability of the natural disasters.

Learning outcomes

Adopted knowledge will provide an objective analysis of different aspects of the disaster, raising awareness among people to reduce the negative impact of disasters and help communities to fight and/or mitigate, and/or prevent catastrophes.

Syllabus

Theoretical part

Historical background. Definitions, classification and distribution of the disaster. Insight and learning about the main groups of disasters according to modern definitions, such as: geophysical, hydrological, meteorological, climatological, biological, astronomical and anthropogenic disasters. Ranking, record, recovery, forecasting and prevention of the catastrophes.

Practical part

Completion of a seminar or scientific paper.

Recommended literature

- 1. Abbott, P. (2012): Natural Disasters. (8th Edition), McGraw-Hill, New York: 1-469.
- 2. Alcántara-Ayala, I. 2002. Geomorphology, natural hazards, vulnerability and prevention of natural disasters in developing countries. Geomorphology 47. Amsterdam.
- 3. Challoner, J. (2000): Hurricane and Tornado. Dorling Kindersley. London: 1-61.
- 4. EM-DAT: The OFDA/CRED International Disaster Database. Internet: http://www.cred.be/emdat Universite' Catholique de Louvain. Brussels.
- Lukić T., M. B., Gavrilov, S. B. Marković, M. Zorn, B. Komac, D. Mladjan, J. Djordjević, M. Milanović, Dj. A. Vasiljević, M. D. Vujićič, B. Kuzmanović and R. Prentović, Classification of the natural disasters between the legislation and application: experience of the Republic of Serbia, Acta geographica Slovenica, 53, (accepted), 2012.
- Munich RE-NatCatSERVICE International Disaster Database. Internet: http://www.munichre.com/en/reinsurance/business/nonlife/georisks/natcatservice/default.aspx. Munich Reinsurance Company. Munich
- 7. Keller, E., and DeVecchio, D. (2012): Natural Hazards: Earth's Processes as Hazards, Disasters, and Catastrophes. (3rd Edition), Prentice Hall, New Jersey: 1-553.
- 8. Ochoa, G., Hoffman, J. and Tin, T. (2005): Climate: The Force That Shape Our World and the Life on Earth. Rodale International Ltd., London: 1-288.
- 9. Ruddiman, W. (2005): Plows, Plagues and Petroleum How Humans Took Control of Climate. Princeton University Press, New Yersey: 1-272.
- Rothery, D. (2007): Teach Yourself Volcanoes, Earthquakes and Tsunamis. Teach Yourself Books, London: 1-304.

Weekly teaching load	Lectures: 4(60)	Student research:
Teaching methodology		

Teaching methodology

Didactic method (monologue), dialogue, discussion, illustrative and demonstrative methods (multimedial presentations), field work

Grading method (maximal number of points 100)					
Pre-exam obligations	points	Final exam	points		
Seminar paper	50	Oral exam	50		